

The Evening Journal.

RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1526.—VOL. XXXIV.

LONDON, SATURDAY, NOVEMBER 19, 1864.

(STAMPED.....SIXPENCE.
UNSTAMPED.....FIVEPENCE)

MR. JAMES CROFTS, SHAREBROKER, No. 1, FINCH LANE, CORNHILL.

Mr. CROFTS transacts business, in the way of PURCHASE or SALE, in every description of stocks, but particularly in BRITISH MINES, in no case departing from the position of a broker, at net prices.

Holders of mining shares DIFFICULT OF SALE in the OPEN MARKET may find purchasers by negotiation, through Mr. CROFTS'S agency. Also, parties requiring ADVISE how to act as to the DISPOSAL, or ABANDONMENT, of doubtful mining stocks may profitably avail of Mr. CROFTS'S long experience on the market in all cases of doubt or difficulty.

* ORDERS to buy or sell RAILWAY and BANK shares promptly carried out, for cash.

FOR SALE:—1500 Okei Tor, 10 Pentre Llyan (offers wanted); North Chiverton, Birch Tor and Vitrifer, East Lovell, East Vor, Frank Mills, South Darren, East Russell, all at lowest market prices; Wheel Hope (very cheap), 5s. 6d.; 500 Wheel Hartley (or any part), 5s. 6d. net cash, until Monday only.

MR. CROFTS calls special attention to the above advertisement of WHEEL HARTLEY shares, all calls paid. Letters will be effective to purchase if in London by Monday's post, or by telegraph up to Twelve P.M. on that day, provided unsold.—1, Finch-lane, Cornhill.

MR. JAMES LANE, No. 44, THREADNEEDLE STREET, LONDON, E.C.

JAMES LANE has FOR SALE at net prices:—5 Basset and Grylls, £2; 3 Buller, £15; 50 Bodo-Aur, 11s. 6d.; 20 Boscawen, 25s.; 20 Bryntall, £3; 3 Basset, £20; 50 Crebore, 37s. 6d.; 100 Calstock Consols, 20s.; 20 Carn Camborne, 32s.; 10 Central Miners, 35s.; 50 Drake Wells, 17s. 6d.; 10 East Lovell, £21; 20 East Rosewarne, £3; 20 East Russell, 50s.; 20 Farn Hill Wood, 5s. 9d.; 25 Great Wheel Bury, £2½; 20 Hallenbeagle; 25 Haven (£25 paid), 25s.; 20 Lady Bertha, 13s.; 20 North Trekerby, £2½; 5 North Basset, 25s. 6d.; 10 North Granbler, £2½; 50 North Devon; 50 New Wheel Martha, 37s. 6d.; 50 South Grenville, 9s.; 35 Tolvadden, 14s.; 10 Wheel Kitty (St. Agnes), £5; 50 Wh. Ludcott, 7s. 6d.

MR. WILLIAM LELEAN BUYS and SELLS all descriptions of ENGLISH and FOREIGN STOCKS and SHARES, INSPECTS MINES, and TRANSACTS all the usual BUSINESS of a STOCK and SHAREDEALER. Parties may rely upon him for sound advice and punctuality in all his engagements.

MR. LELEAN has FOR SALE:—15 Great Laxey, 5 Providence, 50 Bedford United, 3 Clifford Amalgamated, 1 Devon Great Consols, 10 East Caradon, 5 East Wheel Lovell, 1 South Caradon, 1 St. Ives Consols, 5 Wheel Seton, 2 West Wheel Seton, 20 North Trekerby, 50 East Grenville, 20 North Chiverton, 10 South Basset, 100 South Condurrow, 20 Pendean, 100 Prince of Wales, 2 Leadwood, 10 South Darren, 100 West Jane, 20 East Rosewarne, 10 North Croft, 15 East Russell, 50 Great Laxey, 50 Great South Chiverton, 100 Bodo-Aur, 10 East Trekerby, 10 Treigon Consols, 50 Rosewarne Consols, 50 North Great Work, 70 Wheel Emma, 25 Trimley Hall, 60 Vale of Towy, 100 Hawkmoor, 20 Crane, 100 Wheel Curtis, 15 East Carn Brea, 200 North Jane, 100 Great Caradon, 10 Stithney and Carnmeal, 20 East Chiverton, 10 Darren, 25 East Providence, £2½; and 250 North Miners, 3s.

I refer my correspondents to my letter in this day's Journal, page 808.

Bankers: Messrs. Roberts, Lubbock, and Co.

Office, 11, Royal Exchange, London, E.C.

SHARES WANTED IN THE FOLLOWING MINES,

most of which are at the same time strongly recommended for an early and immense rise in value:—

South Condurrow.	Wheel Jane.	East Lovell.
Bryntall.	Wheel Margaret.	Trencorn.
Clifford Amalgamated.	Camborne Vein.	Rosewarne United.
Carn Camborne.	Kitty (Lent).	West Caradon.
New Rosewarne.	South Basset.	Gambler and St. Aubyn.
	Tolvadden.	East Wheel Russell.

Friends and investors, if they would consult their own interests, will do well to act upon this advertisement, and not treat it as one of the empty statements so often put forth in the public journals.

HUBERT BARNES RYE.

Mining Office, 77, Old Broad-street, London, and Mining Exchange, Nov. 18, 1864.

MESSRS. WARD AND JACKMAN, SHAREBROKERS, 2, ADAM'S COURT, OLD BROAD STREET AND MINING EXCHANGE, LONDON, E.C.

Bankers: London and Westminster, Lothbury.

WILLIAM SEWARD, MINING BROKER, STOCK AND SHAREDEALER, 19, THROGMORTON STREET, LONDON, E.C.

Commission, 1½ per cent. on all transactions.

JOHN RISLEY, 32, LOMBARD STREET, LONDON, E.C.

SHARES IN MINES BOUGHT and SOLD on commission, at 1½ per cent., for immediate cash. Bankers: London and Westminster, Lothbury.

RICHARD CLIFT, MINE SHAREDEALER,

late of Redruth, now 48, THREADNEEDLE-STREET, LONDON, where all letters are to be addressed.

MR. WILLIAM BARTLETT, No. 2, BUCKLESBURY, LONDON, has SPECIAL BUSINESS IN—

West Chiverton.	East Basset.	North Trekerby.
Wheel Seton.	Wheel Grenville.	Great Laxey.
Providence.	East Providence.	2 Nangles.
East Caradon.	Bedford United.	Wheel Trelawny.
Wheel Mary Ann.	North Basset.	Trencorn.
Great Wheel Vor.	Clifford Amalgamated.	East Lovell, &c.

MR. BARTLETT still recommends Clifford Amalgamated, North Trekerby, Nangles, Great Laxey, and Providence for immediate investment.

Bankers: Alliance Bank, Lothbury.

MR. T. ROSEWARNE, 81, OLD BROAD STREET, LONDON, E.C., has FOR SALE:—

Bedford United, £2½.	East Gunns Lake, 12s. 6d.	North Shepherds, £4½.
Chiverton, £20.	Frank Mills, £2½.	Nangles, £18.
Clifford, £20½.	Gawton, 12s. 6d.	New Birch Tor, £2½.
East Russell, £2½.	Great Vor, £23½.	West Maria.
East Caradon, £19½.	Great Laxey, £17.	West Maria.
East Rosewarne, £23½.	Hallenbeagle, £3½.	Wheel Seton, £20.
East Lovell, £15½.	Hington, £4½.	Wheel Seton, £20.
East Carn Brea, £2½.	Kelly Bray, 11s.	Wheel Grenville, £25½.
East Basset, £20½.	Lady Bertha, 12s. 6d.	Wheel Crebore, 37s. 6d.
East Grenville, £2½.		West Caradon, £7.

And is a BUYER of:—

East Gunns Lake, 7s. 6d.	Frank Mills, £2½.	Marke Valley, £4.
Wheel Edward, 5s.	Wheel Rose, £20.	East Russell, £4½.

AN OFFER WANTED FOR:—

North Robert.	Tolvadden.	North Pool.
---------------	------------	-------------

MR. ROSEWARNE should be consulted immediately respecting the purchase and sale of mining shares. Money advanced on mining shares.

November 18, 1864. Bankers: Bank of London.

JAMES HUME, SHAREBROKER, 74, OLD BROAD STREET, AND MINING EXCHANGE, LONDON, E.C., is a BUYER of East Grenville,

£2½; North Shepherds, £4; West Tolgus, £25; Union, 15s.; South Condurrow, 29s.; East Lovell, £15.

J. HUME'S "Circular" for November will be sent on receipt of six stamps. As these are the best times to make a careful selection of shares, Mr. Hume recommends those who wish to consult him to do so before the markets resume their wonted buoyancy.

Commission, 1½ per cent.

Bankers: London Joint-Stock Bank.

MR. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S, BISHOPSGATE STREET, LONDON, E.C. (late of 48, Threadneedle-street), STOCK AND SHAREDEALER. (ESTABLISHED TEN YEARS.)

FOR SALE:—75 Bodo-Aur, 10s. 6d.; 2 Treawny, £19½; 25 Bryntall, £2 16s. 3d.; 50 Wheel Unity, 2s. 9d.; 2 Nangles, £17½; 20 East Laxey; 20 Great Laxey; 20 Great South Chiverton (offer wanted); 20 Lady Bertha, 11s. 9d.; 30 Wheel Crebore, 38s. 3d.; 1 Providence, £23½; 20 St. Day United, 26s. 6d.; 3 Great Vor, £23½; 1 East Basset, £20½; 2 Clifford, £23½; 50 Kelly Bray, 11s. 3d.; 10 Rosewarne United, 18s. 9d.; 1 North Rosewarne; 20 Great Retailack, 2s. 6d.; 40 Wheel Harriett, 7s.; 20 Pendean, £2½; 25 North Basset, 26s. 9d.; 1 West Tolgus.

MR. GEORGE BUDGE, SHAREDEALER, No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 17 years), has FOR SALE at net prices:—150 Santa Barbara; 10 East Caradon, £19½; 20 East Basset, and Grylls; 20 East Gambler and St. Aubyn, 15s.; 60 Stithney Metal; 200 Botta Hill, 1s. 3d.; 2 Miners; 2 West Sharp Tor, £2; 50 East Rosewarne, £2½; 25 East Russell; 50 Okei Tor, £3½; 5 Westwold Consols; 125 Anglo-Brazilian, 6s. 3d.; 5 West Chiverton; 30 East Grenville; 50 Camborne Vein; 100 Frontino and Bolivia, 18s. 9d.; 20 North Shepherds; 100 Welsh Gold, 15s.; 20 East Seton; 160 Prince of Wales, 2s. 9d.; 40 Tolvadden, 15s.; 50 Kelly Bray; 2 Providence; 20 Trencorn; 5 Bryn Gwlog; 20 Herdcroft; 100 Gawton, 17s. 6d.; 10 Stithney Carnmeal; 6 Stray Park; 50 Marke Valley, £4½; 50 St. Day United, 26s. 6d.; 20 Wheel Unity; 25 Calstock; 30 North Croft; 2 West Francis; 25 Hallenbeagle; 150 Wheel Pollard, 1s. 6d.; 25 United Mexi- can; 150 Port Phillip, 20s.

STOCK AND SHAREDEALER.—MR. PETER WATSON, ENGLISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES, 79, OLD BROAD-STREET, LONDON, E.C.

Twenty years' experience.
(Two in Cornwall and Eighteen in London.)

Bankers: The Union Bank of London, and the Alliance Bank.

Every information can be obtained on personal application, or by letter, as to purchases and sales of Mine, Railway, Bank, and other Shares and Stocks, and the best investment for capital.

From the close proximity of his offices to the Stock Exchange, as well as the Mining Exchange, PETER WATSON is enabled to act with promptitude on all orders entrusted to him, which at all times are carried out with punctuality.

INVESTMENT FOR CAPITAL.—For a good investment and a great rise in the present price of shares, Mr. PETER WATSON is prepared to recommend four mines, which are paying good dividends (every two months or quarterly), and eight progressive mines, requiring but a further small outlay, which, from the present position and future excellent prospects, he feels confident in recommending at the present greatly depressed prices. The above selection of twelve mines present more than the usual chances of success during the next twelve months. This list will be sent on application to all those who desire it, with the respectful solicitation that investors do their business through PETER WATSON, 79, Old Broad-street, London, E.C.

EAST WHEEL LOVELL.—In my "Weekly Circular," No. 343, of Oct. 7, I stated—"I should recommend my friends to increase their holding at present prices, 8½d. to 8¾d.," and in my "Circular," No. 344, of Oct. 14 (four weeks ago) I stated—"The shares this week have been firm at 8¾d. to 8½d., and will, in my opinion, advance considerably, and this week they have advanced to 14½d. to 15½d. Those who acted upon my advice can now realise a great profit if they so desire."

**PETER WATSON'S WEEKLY MINING CIRCULAR AND
SHARE LIST,** published every Friday, price 6d. each copy, forwarded on application. This Circular contains weekly important information with respect to all the principal Dividend and Progressive Mines in Devon and Cornwall.

79, Old Broad-street, London, E.C.

CAPITALISTS AND SHAREHOLDERS IN MINES will do well to read the "Weekly Circular," published by PETER WATSON, of Friday, November 4, Vol. VII., price 6d. each copy.

In this Circular there are several mines mentioned which are certain to pay good interest, or otherwise greatly advance in market value.

79, Old Broad-street, London, E.C.

JAMES HERRON has FOR SALE the following SHARES, at the prices quoted, and FREE OF COMMISSION:—

10 Anglo-Brazilian.	15 Great So. Tolgus, £1½.	30 South Grenville, 5s. 9d.
5 Anglo-Mexican Mint.	40 Great Retailack.	20 South Condurrow, 29s. 6d.
10 Bedford United, £2 13s.	50 Gt. Northern Copper, 1s.	10 St. Ives Wheel Allen.
5 Bryntall, £2½.	(call paid).	5 South Basset.
20 Bodo-Aur.	5 Gt. Wh. Vor, £33.	20 St. Day United, 26s.
3 Billins, £12.	5 Great Fortune, £2½.	30 Stithney Metal, 27s. 6d.
30 Botta Hill, 2s.	5 Gambler.	30 St. John del Rey, £24.
5 Bryn Gwlog.	5 Great Laxey.	40 St. John del Rey, £24.
20 Bryntall, £2 13s.	50 Gt. South Chiverton.	30 St. Just United, £17½.
1 Buller.	10 Great Wheel Metal.	30 Stray Park, £19.
5 Clifford Amalgamated.	1 Herodcroft.	10 Tolvadden, 9s.
1 Cargill, £38.	15 Hallenbeagle, £2 2s. 6d.	10 Treleigh, 12s.
2 Cwm Erfin, £34.	5 Hington Down, £4½.	1 Treawny, £18½.
20 Carn Camborne, 26s. 9d.	30 Kelly Bray, 10s. 9d.	5 Vigna and Clogau.
15 Chiverton, £2 12s. 6d.	10 Kitty (Lent).	1 West Chiverton, £23½.
5 Chiverton, £2 7s. 6d.	10 Lady Bertha, 8s. 9d.	2 West Sharp Tor.
20 Dale Trekerby, £2½.	15 Lane Cop, £2½.	15 Wheel Edward, 10s.
50 Calstock Consols.	10 Marke Valley, £4.	1 Wheel Seton, £19½.
40 Canner Abraham, 15s.	50 Nant-y-lago, 3s.	5 West Caradon.
30 Camborne Vein, £2 19s.	10 North Pool, 37s.	1 West Seton, £211.
5 Cobre, £29.	5 North Wh. Croft, £23.	1 Wheel Arthur, 3s.
5 Cook's Kitchen, £11½.	50 North Devon, 30s. 9d.	10 West Basset.
10 Clifton & Went, £23½.	20 North Downs, 30s.	2 Wheel Mary Ann.
10 Devon Great Consols.	20 North Trekerby, £2 7s. 6d.	20 Wheel Croft.
100 Don Pedro, 5s. 8d.	50 North Miners, 3s. 9d.	1 West Francis, £24.
1 East Basset, £20½.	30 New Martha, 25s.	15 Wheel Harriett, 11s. 3d.
5 East Carn Brea, £25.	1 North Rosewarne, £17½.	50 Worthing, 17s. 6d.
20 East del Rey, 8s. 9d.	10 North Shepherds, £4½.	10 Wheel Crebore, 38s.
17 East Russell, £4 16s. 6d.	1 New Seton, £20.	50 Wheel Unity, 3s. 3d.
5 East Lovell, £15.	10 North Chiverton, £2.	15 Wheel Unity.
10 East Chiverton, 30s.	2 Nangles, £17.	50 Yudanum, £1½.
15 East Margaret.	50 Port Phillip, 26s. 3d.	
10 E. Rosewarne, £2 15s.	3 Polbreon, £12½.	
10 East Grenville, £2 17s. 6d.	2 Providence, £24½.	
20 East Laxey.	20 Quebrada (£2 10s. paid).	
5 East Caradon, £19.	20 Rosewarne United.	

MR. HERRON continues to recommend Clifford Amalgamated, Quebrada, West Sharp Tor, Hington Down, Cwm Erfin, and West Caradon.

2, Adam's-court, Old Broad-street, November 18, 1864.

**MESSRS. VIVIAN AND REYNOLDS, 37, OLD BROAD
STREET, LONDON, E.C., MINING ENGINEERS, INSPECTORS OF MINES,
COMMISSION, AND GENERAL AGENTS for the PURCHASE or SALE of MINE
SHARES, RAILWAY, and EVERY OTHER DESCRIPTION OF STOCK.**

Commission on share transactions 1½ per cent. on £100 and above, and 2½ per cent. on less sums.

MR. EDWARD COOKE, MINING SHAREBROKER, 2, CROWN CHAMBERS, THREADNEEDLE STREET, LONDON, E.C.

(Member of the Mining Exchange.)

MR. EDWARD COOKE has removed to the above address, where all communications on matters relating to business will meet with his usual attention.

Nov. 18, 1864. Bankers: Alliance Bank, Lothbury.

MR. GEORGE BATTERS strongly recommends his friends to buy West Chiverton, Chiverton, Herodcroft, South Caradon, Devon Great Consols, Great Wheel Vor, Prosper United, Wentworth Consols, and Stithney Wheel Metal for invest- ment. These shares will pay good interest for money at present quotations.

76, Old Broad-street, London, E.C.

WILLIAM WARD, 29, THREADNEEDLE STREET, LONDON, E.C.

SIR,—Referring to my Circular dated 12th October, 1863, announcing my retirement as chief clerk in the office of Messrs. Dunsford and Hanks, and the commencement of business as a mining broker, it was not amongst my thoughts to suppose such an event possible as occurred on Wednesday last, by the sudden death of my late respected employer, Mr. Dunsford, of which melancholy occurrence you will, no doubt, have been already informed.

By the advice of several friends, I have been strongly recommended to tender to the committee and shareholders of the numerous mines in the late Mr. Dunsford's office my services as future secretary, relying on the fact that, during my 11 or 12 years' services under Mr. Dunsford as chief clerk, an intimate acquaintance with all the details of his office will at least be a recommendation in my favour; and for the rest I trust that nothing more is wanting on my part than the assurance that the utmost zeal and closest attention shall at all times be devoted to further the interests of all the adventurers, and not less so to those who by their vote or influence may assist in confiding them to my care.

Trusting that you will take my application into favourable and immediate consideration, I remain, your obedient servant,

WILLIAM WARD.

29, Threadneedle-street, E.C., November 12, 1864.

FOR SALE, EACH NET:—

1 West Seton, £215.	2 Treawny, £19½.	10 Grenville, £25½.
25 North Downs, 15s. 6d.	5 West Caradon, £24½.	20 Long Lake, £2.
50 East Rosewarne.	20 Frank Mills.	

Apply to Mr. J. W. HUTCHINSON, 78, Old Broad-street, London (Member of the Mining Exchange).

GEORGE RICE, SHAREBROKER, 5, COWPER'S COURT, BIRCHIN LANE, LONDON (22 years' experience), Member of the Mining Exchange, has SPECIAL BUSINESS, as BUYER or SELLER, in the following:—

Clifford Amalgamated, £23-33½.	North Shepherds, £4½-4¾.	Closing quotations.
Chiverton, 6½-6¾.	Nangles, 17-18.	
East Russell, 4½-5½.	Marke Valley, 4½-4¾.	
East Carn Brea, 6½-6¾.	North Trekerby, 2½-2¾.	
East Caradon, 19-19½.	Wheel Crebore, 37½-38.	
East Wheel Lovell, 15½-15¾.	Wheel Grenville, 25½-26.	
E. Wh. Grenville (call paid), 6-6½.	West Chiverton, 62½-67½.	
Great Wheel Vor, 33-33½.		

EAST LOVELL, EAST GRENVILLE, and GREAT VOR.—Shareholders and speculators who wish to operate in these shares to their advantage should consult GEO. RICE when to buy or sell. The soundness of the advice given during the present year can now be tested by the results.

For all shares purchased by GEO. RICE he will pay cash on receipt of transfer, Money advanced on mining shares.

Nov. 18, 1864. Bankers: Bank of London.

NOTICE OF REMOVAL.
MR. T. P. THOMAS begs to inform his friends and the public that he has REMOVED from No. 2, Crown-court, Threadneedle-street, to No. 6, NEW BROAD STREET, LONDON, E.C., where he trusts to receive a continuation of their favours in his business of sharebroker and share auctioneer.

VALUABLE FORFEITED AND OTHER MINING SHARES FOR SALE, BY PUBLIC AUCTION.

MR. T. P. THOMAS has been favoured with instructions to SELL BY AUCTION, at Garway's Coffee-house, Change-alley, Cornhill, London, on Thursday, the 24th day of November instant, at One o'clock, the FOLLOWING VALUABLE SHARES:—

50 East Wheel Grenville (unappropriated).	82 Cwmymlog Lead Mines	100 Great Northern Copper.
190 Lady Bertha (forfeited for non-payment of calls.)	125 Great Retailack.	
300 Wheel Unity Consols.	20 Gwydr Park.	5 West Caradon.
8 Rosewarne United.	25 Wheel Grenville.	135 Lady Bertha.
3 Wheel Seton.	5 Bryn Gwlog.	10 North Robert.
1 South Tolgus.	3 Billins.	34 Rosewarne United.
5 Nangles.	50 Long Lake.	100 Redmoor.
5 Great Wheel Vor.	50 Wheel Hope (lead).	5 West Fowey.
10 East Wheel Lovell.	50 Wheel Crebore.	70 Wheel Union.
16 Calvadnock.	5 Great Laxey.	5 New Wheel Lovell.
500 Nth. Miners, preference	3 West Chiverton.	1 Wheel Builer.
(12s. 6d. paid).	30 Wheel Chiverton.	4 Ketanna Hill.
50 North Miners, old	30 East Carn Brea.	50 East Trevelly.
(£1 paid).	10 Tincroft.	75 West Trevelly.
150 Prince of Wales.	50 Bodo-Aur.	65 Wheel Edward.
3 Rosekarnoweth.	30 Chiverton Moor.	30 Wheel Hope.
80 South Grenville.	25 Drake Wells.	30 West Stray Park.
24 South Darren.	10 East Devon Consols.	9 Wheel Margaret.
200 Vale of Towy.	25 Calvadnock.	6 Boscawen.
50 West Great Work.	40 Criccieth Slate Company	50 Caradon United.
15 Worvas Downs.	(£2 10s. paid.)	50 East Providence.
2 Wheel Margery.	20 Boscawen.	50 Illogan Consols.
20 Wheel Hearn.	50 West Condurrow.	9 South Grylls.
50 Great Caradon.	35 Wheel Pollard.	20 East Vor.
50 Wheel Emma.	86 Caradon Hill.	20 Festinog.
30 Wheel Unity.	700 Great Northern of	10 Lower Park.
30 East Chiverton.	South Australia.	10 North Great Work.
100 Gardina United.	6 Polbreon.	50 Central Grylls.
50 Croser Valley and Port	10 South Carn Brea.	200 Okei Tor.
Madoc Slate (£2 pd.)	90 East Seton.	110 West Forey Consols.
15 Rosekarnoweth.	10 North Granbler.	20 Tolcarne.
290 North Pool.	50 Wheel Pollard.	28 North Rosewarne.
20 Canner Wh. Abraham.	2 Calvadnock.	50 Great South Tolgus.
30 Patent Atmospheric	10 North Frances.	20 Haven Silver-lead Mine
Main Salvage Com- pany (£1 paid).	15 Wheel Grylls.	(Limited), £5 paid.

For further particulars as to East Wheel Grenville, application may be made to Mr. JOHN WARREN, George-yard, Lombard-street; as to Lady Bertha, to Mr. GEO. LIVINGSTON, St. Helen's-place, Bishopsgate-street; and as to the shares generally to the auctioneer, at his offices, 6, New Broad-street, London.

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL MINING SHAREDEALER, 37, OLD BROAD STREET, LONDON, E.C.

MR. FRANCIS G. LANE, No. 2, ROYAL EXCHANGE,
LONDON, E.C., has the following SHARES FOR SALE, free of commission:—

20 East Caradon, £19½.	50 New Wh. Martha, 20s.	25 East Wheel Vor, £2.
50 Wheel Crebore, 37s. 6d.	50 Wheel Hartley, 7s. 6d.	45 New Birch Tor, £2 8s. 9d.
25 South Darren, 34s.	45 Wheel Edward, 8s.	50 Wheel Ludcott, 10s.
50 Prince of Wales, 2s. 10d.	10 Great Laxey, £16½.	50 North Miners, 3s. 6d.
5 Prosper (Breeze), 35s.	15 Chiverton, £26½.	25 East Russell, £25½.
10 North Basset, 26s. 6d.	50 Frontino & Bolivia, 16s.	50 Wheel Pollard, 1s.
20 South Lovell, £2.	35 St. Just United, 35s.	50 Glasgow Carn, £24½.

BUYER of Marke Valley, East Caradon, and East Lovell. Either for cash, or account. Sellers please state lowest price.

Faithful of respectable persons can have transfers registered into their names previous to payment. Bankers: London and County Bank.

MR. THOS. THOMPSON, MINING OFFICES, 12, OLD JEWRY CHAMBERS, LONDON, E.C.

MR. J. W. GILBERT, MINE SHAREBROKER, 1, PINNER'S COURT, OLD BROAD STREET, LONDON.

HENRY GOULD SHARP, STOCK AND SHAREDEALER, 32, POULTRY, LONDON, E.C.

(Member of the Mining Exchange.)

HAS BUSINESS TO TRANSACT IN THE FOLLOWING AND OTHER MINES:—

Clifford Amalgamated, £24-34½.	Marke Valley, £4-4½.	Market Prices.
Wheel Seton, 197½-200.	Great Laxey, 16½-16¾.	
Wheel Mary Ann, 14-14½.	West Seton, 205-210.	
Nangles, 18-19.	South Caradon, 535-545.	
North Basset, 1½-1¾.	East Wheel Vor, 31½-32.	
Great Wheel Fortune, 7-7½.	South Condurrow, 31½-32.	
East Carn Brea, 6½-6¾.	Kelly Bray, 10s-12s.	
East Providence, 2½-2¾.	Wheel Grenville, 63½-64.	
Devon Great Consols, 585-590.	Long Lake, 2-2½.	
Wheel Union, 10s-10s.	East Basset, 60-61.	
Providence, 35-36.	East Grenville, 6-6½.	
Wheel Treawny, 19½-20.	East Wheel Russell, 5-5½.	
Tincroft, 16½-16¾.	West Tolgus, 65-67.	
Wheel Caradon, 68½-74.	East Lovell, 15½-16½.	
Lady Bertha, 10s-12s.	Great Wheel Vor, 33-33½.	
North Croft, 2½-2¾.	Wheel Crebore, 37½-38.	
Wheel Harriett, 5s-5½.	East Caradon, 19-19½.	

Original Correspondence.

BORING MACHINERY—ITS INVENTION—No. I.

SIR,—The substance of Mr. Crease's letter of Oct. 15, in reply to mine of the 8th, goes to prove two things—that I have no title whatever to having any hand in designing the machine in question, the same having been designed by Mr. H. G. Williams and himself,—which I deny. The following is a specification of the machine made by me, entirely from my own designs—

1. Vertical cast-iron pillar, fixed to a pair of axles, having four wheels, to run on tramroad; four set screws through axles, to press on hard wood or iron plates laid on bottom of level, to take the strain of axles when pressure is given by screw at top of pillar in fixing the machine; they also prevent the machine slipping from its position by the jar when in motion, a thing certain to take place with the mere wheels on the rails; a wedge driven under the axles may be used for the same purpose, but is not so handy.

2. A single screw at top of pillar, to which a swivel claw is attached, similar to a screw-jack; a block of wood is placed on the top of the claw, and the screw being tightened, the block is forced against the back of the level. When this is done carefully, and the set screws through the axles adjusted, the pillar is perfectly firm and rigid.

3. A cast-iron sliding socket, fitted to a vertical pillar, and working loose on same; inside of socket a rack is fitted, which is also loose, and will slide in the socket. The bottom end of the rack rests on a loose collar, which is raised and lowered as required, and dispenses with the necessity of having a rack the whole length of the pillar, which would be very liable to breakage.

4. A pair of discs on side of socket, forming a swivel-joint, by which the sliding-bar (6), with the cylinder and borer at the end, can be elevated, depressed, or reversed, as required. This is fixed by two strong screws, and the heads running in a T groove in one of the discs.

5. A sliding-bar of cast-iron turned and fitted into socket (4), so that it will either slide or revolve. This is fixed with a single set screw, when in position.

6. A swivel-joint at end of bar, on which the slide for feed and cylinder is fixed. These complete the arrangements for fixing borer in all positions.

7. A self-acting motion for turning and feeding the borer and working the valve; the whole is worked by two fixed collars on piston-rod, and the valve by a simple lever and connecting rod; the turning and feed motion by the same lever, and another connecting-rod. The lever has a double end, which plays loosely between the collars, to each end of which are fitted two tappets that are moved by the collars. This arrangement admits of the piston-rod (in which the borer is fixed) turning. The rod for turning and feeding borer is connected with a bell crank lever, and thence to a ratchet-wheel by lever and short connecting-rods. The ratchet-wheel is fitted on a spindle that is inserted through the cylinder cover and up the centre of the piston-rod, which it slides upon on the side of the spindle. A groove is planed the whole length. At the end of the piston-rod a fast key is placed. The ratchet-wheel, being fastened to the spindle, when turned turns the piston, piston-rod, and borer at the same time; also to the same spindle an arrangement of change wheels for working the feed screw and changing speed of same.

8. Boring up the end of piston-rod, and fitting borer in same, which is fastened with a set screw.

9. Fitting a slide on one side of cylinder, the cylinder having no flanch or projection on the other side, admits of the whole being bored nearly in the same line as the level, either at the sides, roof, or bottom, the whole forming a complete boring machine, every part of which was both designed and made by my directions entirely; and it is wrong on the part of Mr. Crease, or any other person, knowing the facts of the case, to contradict this statement; and that Mr. Crease has both admitted my claim, and also his private opinion of its worth, I have an agreement to prove.

Nov. 16.

GEORGE GREEN.

THE MONEY MARKET, AND THE BANK ACT—No. II.

SIR,—In my last letter I showed that there was a want of circulating medium, and that the only remedy was an issue of Government Bank notes to increase its supply. We can always obtain gold for notes, but we cannot in a panic like the present get cash for good bills. A trade comprising transactions of millions every day cannot be carried on with notes and coin alone, for these do not amount to a tythe of the business transacted. The discounting of bills is arrested, because there is a fear that there may not be enough of gold to carry on the trade of the country. If our bankers knew where to get any quantity of gold or Government notes in exchange for good securities they would have no such fears, and would continue to discount their customers' bills as before. It is, therefore, the deficiency of gold, or the want of some substitute for it, which is the cause of the present crisis. If it be said that the cause is the existence of a larger trade than there is capital in the country to carry on, I answer that it is not so. In my last letter I showed that there had been no unusual outlay of capital for some years back; I am, therefore, justified in saying that the want of circulating medium, or the fear of that want, is the cause of the present famine in money. That the Bank Act creates a monopoly, and restricts the freedom of trade and action, none will attempt to deny; and if Free Trade is the right principle, and monopoly and restriction the wrong one, it follows that the Bank Act of 1844 must be altogether fallacious, and opposed to progress and prosperity. That it is so I have not the slightest doubt. The late Sir C. Lewis said that the Act did good in ordinary times, but that it did more harm in one day than all the good it did in ten years. Now, if the Act produces so foul a blot every ten years, it must be a rotten system indeed. If, with so bad a system, we have reached a vacillating and precarious prosperity, what good may we not expect under a better system, for we have prospered not because of the Act of 1844, but in spite of it. Let the Act be now reformed in the manner I have ventured to suggest, and the next ten years will show the true nature of Sir Robert Peel's false system of currency and finance.

When hundreds of our mercantile firms have been carrying on a legitimate business, apart from all speculation, are reduced from wealth to poverty, and when the hundreds of thousands they employ are thrown out of their daily bread in consequence of a bad system of banking, the people may well raise the cry of injustice. Yes, the Bank Act is unjust to the merchants, and unjust to the workmen and their families. I do not, of course, blame the Bank directors for applying the screw and bringing on a crisis; but I do blame the Legislature for allowing an Act which has repeatedly proved itself to be wrong to remain on the statute book.

But I am told that a check to speculation and over trading is wanted, and without the restrictions of the Bank Act no check could be found. Now, this is quite a mistake; for the principle of Free Trade will act as a much better check to speculation than that of any check which can be set up by Acts of Parliament. Self-interest between lender and borrower is the only proper and safe check. When the Bank of England is left to its own resources it will increase or contract its issues at pleasure, and not in an arbitrary way, as at present, in obedience to an Act of Parliament. If it be said that the Bank directors would oppose the abolition of their monopoly, I reply that we only require to put the matter fairly before them to get their consent to any reasonable measure of reform. The Bank has its duties as well as its privileges; and it will only be by considering the general interests of the public at large, as well as the private interests of the Bank, that they will be able to steer their course through the present troubles with credit to themselves. I say that it is the interest of the Bank to give up their monopoly. At present, the Bank is a great loser by holding so much gold which yields them no interest, and by a permanent loan to the Government of 11,000,000*l.*; but when relieved from these burdens it will have the full benefit of its capital and issue of notes. The Bank, with all its privileges, has never paid more than a 10 per cent. dividend, whereas several of the other banks pay 20 per cent. Only let the Bank of England get rid of the Act of 1844, and it will double its dividends. That the Bank of England, as well as every other banking establishment in the kingdom, is interested in carrying out the proposed measure there cannot be a doubt. There will be no inconvenience to the Government in paying off the debt of 11,000,000*l.* to the Bank, which they will do out of the proceeds of the legal tender notes. The Government, therefore, can offer no opposition, for there is no practical difficulty in the way. Let Mr. Gladstone bring forward a comprehensive measure of monetary reform, based on the principles of Free Trade, and he will have the support of all, except a few short-sighted or interested parties.

If it be said that our capitalists will never consent to Free Trade in money, I point to the protectionists, who were at one time as much opposed to free trade in corn as the bullionists are now opposed to free trade in money. The protectionists thought free trade would be their ruin; but now that they see the result they are convinced that they were in the wrong, for agriculture has flourished ever since, and it will be the same with free

trade in money. How is it possible that capitalists can gain by the occurrence of money panics every ten years? They must put their money somewhere, and all stocks and shares suffer by these convulsions. As for panics raising the interest of money, that is just the reverse; for to raise interest to an exorbitant rate is certain to reduce it lower than ever, for that has been the invariable experience of all money panics.

Since my last letter I have read a series of articles in the *Economist* newspaper. The writer commences by admitting that the Bank Act is fallacious, but the remedy he proposes is no remedy at all. We are to be condemned to retain a bad law, and to place ourselves at the mercy of the Queen's Ministers to deliver us from it whenever it becomes too bad to be tolerated. I ask that journal, which professes to be one of the organs of the Free Trade party, why they should desire the continuance of a monopoly when they advocate the opposite policy in corn and other commodities? Mr. Gladstone says if a principle be good for one thing it must be good for another, or it is no principle at all; and it would be well if the *Economist* would keep that maxim ever before it. If there were no remedy for the evils of the Bank Act we might submit to the plan of the *Economist*, but when there is a remedy at hand we shall only shut our eyes to our own interests if we do not call for a thorough reform.

It will be observed that part of my plan is to allow the Bank to issue as many notes as it pleases without any obligation to hold gold or Government notes against them. It will be found that this is the only true and safe policy to pursue. The Bank will, of course, protect itself against any risk of run by holding either Gold, Exchequer bills, or Government notes, and, as it is a better judge of the amount it ought to hold than Parliament can be, it is much better to leave the Bank free from legislative interference.

The present crisis seems to have seen its worst, and is now on the decline. The lost bullion has been recovered, and the Bank begins to reduce the rate of interest; in other words, to relax the screw. The patient has been sufficiently reduced; money has been taken out of trade, and is now lying idle in the hands of capitalists. Money is now in excess, showing how an exorbitant rate of interest produces a low rate. It is to be feared that trade has received too great a shock to recover for some time. We may soon have interest as low as it has ever been before, but that will be no sign of health or recovery; on the contrary, it will be a sign of deadness and collapse. This shows how absurd it is to suppose that the capitalists can have any interest in maintaining the law as it at present stands. No possible reform can, of course, undo the evil which has been committed, but it will prevent any future crises, and hasten the recovery from the present collapse by setting the springs of trade once more in action. The sooner the better, for unless something is done to infuse new life into the system our imports and exports will fall off, the revenue will decline, and, instead of being annually reduced, taxation will be increased. And if the income tax be called on to make good the deficiency, which is more than probable, the moneyed interest will see the folly of maintaining the present system.

Prior to the meeting of Parliament, an association should be formed for the purpose of disseminating correct information on the subject, and sending up petitions to Parliament. This is the proper course to take, and when we consider the enormity of the evils to be remedied, which affect the pockets of all classes of the community, I cannot doubt that something will be done when Parliament meets in February.

A. ALISON.

72, Sloane-street, Nov. 14.

ON THE DRESSING OF ORES—No. III.

SIR,—It is well known to all accustomed to the dolly, or tossing, tub that in the process of stirring the ores the light fine waste rises to the top, that the finer particles of the tin, which offer little resistance to the centrifugal force, float around the sides of the tub, while the centre is occupied with the coarse heavy particles of the ore; so that here a complete classification into three sizes is effected. The same separation takes place if the substance operated on be simply sand, and if each class can be removed as it is separated, the machine dolly-tub becomes continuously self-acting. The coarse heavy particles which fall in the centre may be easily removed through a hole in the bottom of the tub, which should be fitted with a pipe having a plug or valve at the end, which should be so adjusted as to open at suitable times, to allow any deposit to escape; through this pipe the rough tin and waste only will escape.

If, now, a vertical opening be made in the side of the tub, of which the bottom edge is a little above the bottom of the tub, and a small cistern be fitted outside this, so as to keep the water to a proper level in the tub, the action of the centrifugal force will be to carry all the lighter portions of the ore which either rise to the top or are carried to the sides through the vertical opening into the cistern, where it receives a sudden check, precipitating a portion at once to the bottom of the cistern, while another portion would continue to float, and could be carried away by allowing a portion of the water to overflow the cistern. The portion deposited could also be removed by a valve placed at the bottom, and connected with the machinery, by which it might be opened and shut at regular intervals. Such an alteration would render the machine dolly-tub self-acting, and the work might continue to go on for any length of time when once properly adjusted, and a constant and complete separation of the ores into three classes would be kept up. If, now, the ores from the stamps were carried into this machine it would be separated into the following classes:—No. 1, from the bottom of the tub, consisting of rough tin and the coarsest waste; No. 2, from the bottom of the outside cistern, consisting of fine tin and rough waste; and No. 3, flowing over the top of the cistern, consisting of the finest tin and waste, which may be further separated into smalls and slimes, by conveying it into a second cistern, from the bottom of which the smalls might be allowed to escape, while the slime would be carried off in the water flowing over the top. The stamped ores would now be effectually classified, and prepared for washing.

Those persons who have seen the action of Zenner's rotary buddle will not be surprised at my proposing to conduct each of the different classes into which the ores are now divided from the point of escape to one of these valuable machines; and as we have now this advantage, that in no case will the particles of tin be larger than the particles of waste, the separation of the one from the other may be completed by the action of their inertia, and the resistance presented to a current of water. No. 1, consisting of rough tin and rough waste, will be easily separated by the rotary buddle, because both presenting nearly the same surface, the heavier particles of tin remain behind, while the waste is carried away. No. 2, consisting of fine tin and rough waste, is separated with equal facility, for the rough waste presenting a larger surface than the tin, and being also lighter, would be readily carried back, leaving the fine tin remaining on the surface of the buddle. No. 3, whether treated as smalls or slimes, will be cleansed with equal ease on Zenner's buddle, a proper attention being paid to the quantity of water and the velocity of the table.

It might be found desirable in practice to let a second buddle take up the tailings of each class, but the principle would be the same. With these two machines, so arranged that each class of the ore should flow from the place of escape from the dolly-tub to the buddle, the work would be done better, and more economically. The machines once adjusted would continue to produce the same effects as long as they are supplied with the same material, for machines never neglect their work; therefore, the results will be uniform. Also, the labour required will be to supply the stamping-mill with stone, and to remove the cleansed ore after it has passed over the buddle; and as two catch-pits should be formed for each buddle, there will be no loss of time, for one pit can be filling while the other is being emptied. The only other labour required will be to look after the machine, and see that everything continues in order.—Nov. 15.

WILLIAM RICKARD.

THE COAL TRADE IN AMERICA—EMIGRATION.

SIR,—I am anxious to draw attention to the great advantages that America presents just now as a field of labour, and the inducements to emigration there. Owing to the immense number of men that have been enlisted and drafted into the army in the States, the supply of skilled labour has been very much reduced, and especially in the production of coal, for which so much labour is required, and which is a necessary of life, the scarcity is severely felt, and labour is at a premium. In the case of American citizens this advantageous position is counterbalanced by the constant liability to be drafted into the army; but the immigrant who remains a British subject, and takes no steps to become naturalised, is not liable to that, and cannot be touched, but remains peacefully at home, reaping the benefit of his neighbours' misfortune.

In order to give a definite idea of the present condition of the miner, I will state a few facts in relation to their situation at the coalfields I have the management of, and, first, as to the locality and character of the mines. They are situated in what is generally known as the Cumberland coal region, about 200 miles from Baltimore, on the line of the Baltimore and Ohio Railroad. One of them, called Midland, is in Allegany county, Maryland; the other, Hampshire, in the county of that name, West Virginia; they are two miles apart. The character of the coal is semi-bituminous. It is soft and easy to work, requiring no blasting. The thickness of the seam is 12 feet. As it crops out

round the sides of hills, it is mined from level openings, and the working are dry and well ventilated. There is no gas in the mines.

Second, as to wages. The rate now paid to miners is \$1 per ton of coal loaded into the mine cars, and as the car loads, or six tons, is the ordinary day's work for one man, they can earn \$6 per day, which is just now equivalent to about 1*l.* in English money, and it will buy a larger amount of the necessities and comforts of life than in England.

Third, as to accommodation. We have a large number of houses close to the mines; they are all detached cottages of three rooms and kitchen each. They have a good-sized garden, and the occupants can have pasture for a cow, and may keep pigs and poultry. The rent charged is from \$3 to \$3.50 per month. The country is mountainous, and the climate very fine and healthy. The greatest quantity and variety of vegetables and fruits are grown, including the hop and the grape. There are plenty of straws in the vicinity, which supply all sorts of provisions and clothing. They are independent of the mines, and the truck system is unknown. Prices are generally low, owing to the competition amongst them.

I am now prepared to employ a considerable number of more men than there are at present at these mines. We are turning out about 400 tons per day, and could double this quantity if I had a sufficient number of hands. I will be glad, therefore, to hear from any respectable men that would like to go out, and to give any further information that they may desire. The time occupied in the passage from Liverpool to New York is 12 to 14 days; the cost is 6*l.* or 7*l.* by steamer, and 4*l.* by sailing vessel. I would arrange to have a person meet the men at the landing place, for the purpose of protecting them from the sharpers that prowl about there, and would forward them to the mines, advancing the money required for their expenses from New York. I expect to return to New York in a few weeks. The name and address of the company I represent is Hampshire and Baltimore Coal Company, 59, Trinity-buildings, 111, Broadway, Victoria-park, Manchester, Nov. 1.

THOMAS GREENHILL.

YUDANAMUTANA AND BLINMAN MINES.

SIR,—I beg insertion of the following paragraph, which appeared in the *South Australian Register* of Sept. 26; also the enclosed extracts from a letter received by the last mail from Adelaide. The fact that a summary of Capt. Anthony's monthly reports appears periodically in most of the *South Australian* papers, and remains unchallenged and undisputed in Australia, is, I think, the strongest evidence that can be adduced of their truthfulness.

A SHAREHOLDER.

"Capt. Anthony, of the Blinman, reports, under date Sept. 17, that the operations have been during the past month—driving a 20 fathoms level, at No. 1 shaft; sinking a winze between 19 and 15 fms., at No. 2 shaft; driving a 10 fms. level south of Big Bunch, driving a 10 fms. level north, at No. 4 shaft; and breaking ore in the stopes. Throughout all the workings the yield of ore has been most satisfactory, while due regard has been paid to the ventilating and properly laying open the mine for future working. The stopes in bottom of the 10, and the top portion of Big stopes, continue to give rich ore in large quantities as ever, and the levels north and south in the 20 are showing large deposits of grey and red oxide and black ore. There are over 100 tons of dressed ore, and about 7 tons of pig copper ready for drays. Capt. Terrell, of the Yudanamutana, reports that the stopes are yielding a fair supply. He has raised during the past month over 30 tons of ore of high percentage. On the whole, the reports of the captains and the superintendent (who has just returned from the mines) are most cheerful and satisfactory with regard to the property; and when the great difficulty of obtaining cartage for the produce is overcome, large periodical shipments can be regularly made by the company. During the past week the *Oriental* has taken on board about 100 tons of ore, averaging 50 per cent., and 17 tons of copper pigs, of 95 per cent., which, together with the large shipment per *Sea Nymph*, to Sydney for London, in July last, will represent a money value of produce sent home during the past three months of nearly 11,000*l.*"

"I can assure you that now the Blinman Mine is laid open a very large quantity of ore can be raised monthly; in fact, at the present rate, twelve miners could easily break 100 tons of very rich ore per month, besides putting a large amount of ore to smelting. A Mr. Tregoning, of London (an inspector of mines), has just returned from a visit to the North; he has spent a good deal of time at the Yudanamutana and Blinman Mines, in reference to which he states that 'he was not prepared to see such mines.' The sight of the 'Big Bunch' greatly astonished him, and, upon my asking him what he thought of the mines, replied, 'They do not require a second thought.' A large carrying train at Melbourne is expected to place upon the Port Augusta district from 50 to 100 horse-teams, during the temporary absence of sufficient bullock-drays, caused by the late drought; indeed, had it not been for the scarcity of cartage, a very large quantity of the ore already raised (some 4000 tons) would have been shipped. It has been an unusually dry season, but it now looks very threatening for the usual rain."

MR. NICHOLAS ENNOR'S SYSTEM OF GEOLOGY.

NO. XVIII.—THE UNITED MINES HOT WATER.

SIR,—My last letter was closed on the Clifford lode being a fissure. I have no objection to discuss this subject on some future day. I cannot help remarking that I fear Mr. Smyth was, like me, unfortunate, and fell into some old mine, where the lode had been worked out for some length, when he became alarmed, he thinking himself in a crack that opened after he passed in the morning, and recorded it in his memorandum book as a fissure just opened to form a new lode. I knew where I was, and thought myself fortunate to get out not much hurt. I might have given the old fathers who made it a rough prayer. It appears as though he is still a member of the German school, or the bygone English one; but the question comes to this—Does he believe the earth cracked abroad to form lodes? If so, I ask him to explain how this V-place remained open for thousands of years, till it became full with metal? Let us suppose the right-hand one to be Clifford lode, the left-hand one a lode north (say) 20 feet wide, or if only 20 inches, what supported the kilias rock in this V for a single minute? They ought to know the earth is made up with angular pieces; as these, then, let us suppose all the lodes in the Camborne and Redruth districts were once cracks; what a miserable world it must have been for man to live in! Were it so, the old Druids would have used up every rock on the hills for bridges, to get to the hills, then their place of worship. Surely a large number of the inhabitants must have fallen in. How strange ones are yet found; they must be all gone. They may as well tell us if they fell headlong into the new-discovered interior fire. I now for the first time notice that he, in his remarks at the meeting, is reported to have stated that lodes were actually cracks, and were filled up with metallic substances. I must say I cannot come to the conclusion that Mr. Smyth ever stated what the reporters charged him with. Were I situated as Mr. Smyth is, I would do as Mr. Reeks did, deny it in full. Any man has a right, if he sees himself wrong, to turn aside; I would myself, if I thought so. Sir R. Peel, and most of our great Conservative leaders, of late discovered they were nothing better than the blind leading the blind, and they made no scruples, but turned right round. Then, I say that the leading geologists who attended the meeting at Bath were a thousand times further behind than them; but we have now a hope that Mr. Alison, if true to his colours, will give them a good charge, and send them all to the Antipodes, there to remain until he gets up his new system of geology. I notice what Mr. Smyth states as to the miners saying it was sulphur dissolving which caused the hot water: they said the same to me, but a keen look at the ends of ground told me it was not the case; I saw even new crystals forming there. The late analysis, if correct, will bear me out, as it shows, as they say, no sulphur; but I say it must contain a small portion of sulphur, iron, and copper; it cannot be otherwise. Still their assay proves that hot water is not produced from decomposing sulphur; then we have every reason to come to the conclusion that nothing is at a standstill, all is either growing or decaying. Then I take up Mr. Smyth on his own showing, that lodes were filled up by mineral deposits; then let him tell me where this mineral comes from; if some mineral deposits were not decaying, and going off to re-form in some new crack, then I argue that sulphur, iron, copper, and silica were dissolving at a, or even a, b, and c, and they passed through the earth's channels, until they all met at z, or say, in the United Mines crack, where they all had such love or affinity for each other that they united as fast as they came; they agreed even to go so far as to let a trace of sulphur from the late assay can be found to go off; then I may fairly say if sulphur, iron, and copper can combine or unite, and form a massive rock of yellow sulphates of copper, of quite a different colour from either of the three in their originals, without undergoing a chemical action? I next ask if it is possible for a chemical action to take place, and form a rock chiefly composed of sulphur and iron, without producing a great heat? I say it cannot possibly do so. I am led to believe that Mr. Smyth is, or I rather hope was, inclined to think the hot water at this mine is produced from the interior fire; this I have to contend with, by various estimates. The earth contains from 450,000 to 80,000,000 of square miles of fire. Mr. Smyth says the boiling point is 212° F. In his next remark he attempts to show that a spring, discharging 250 gallons of water per minute, heated from the boiling point, $\frac{1}{2}$ mile deep, holds on to within 200 fathoms of the surface, at 120°, and not a trace of heat appears at the surface. I ask him to show if it boiled at $\frac{1}{2}$ mile deep why it should not continue nearly as hot even to the surface? Heat and steam both have a tendency to fly upwards, and if coming from a boiling point must soon send us all to seek the poles.

I next notice what he says as to the ore and hot water deepening as we go east, and that the upper portions of the lode are poor (this means unproductive) in the Clifford. I agree with him on this point on this section. Were he to look at the mine section, he would see the ore back west through the United Mines, he would find the ore there more shaly, and dipped east. It is now at 200 fathoms deep, and into Clifford. I may notice that all ore dip east or west, and the officials would be doing only their duty to the country if they were to collect all the sections in these mining districts, and see what portion dipped each way. I think it likely they would go far to establish it as a law that deposits of ore dip east; the shoots of ore not found to do so may be accounted for by slides or cross lodes turning them at times.

I will pass these miners' remarks for the present, and take up and attempt to show how hot water is produced in mines. I pass all the long-shot men, and 60 millions of miles of fire, as I am no fire worshiper. I next notice that in nearly all my foregoing letters I have attempted to show that a body of fire cannot exist in the earth, neither is it required. I repeat again that fire is nothing more than electricity out of order: every substance moves and grows; atoms find each other, collect and unite, and form bodies quite different to any one of the originals. I believe silica is almost the only exception. Silica joins nearly every substance, and a great deal of silicious rock is also found with only traces of other substances, and then all these new formations while uniting and forming, as I before noticed, must undergo a chemical action, and every single body of formation will raise a heat sufficient for self-action to unite and form a large body of an angle of about 45° east. This heat has risen to about 120°. I believe nearly every substance varies as to the degrees of heat required to bring it to perfection. If too hot or too cold no life is produced; if fire be produced by mishap the mass is dispersed. This, I say, is the action now going on at the Clifford Mine; here are sulphur, iron, copper, and silica, with a few other substances coming from some other place; they meet and unite, and form a rock of sulphate of copper. Most men know that sulphur and iron are substances inclined to produce heat when they meet. Here they have met, where they produce heat, but nothing more than is required to unite and form so large a body of sulphate of copper. The seat of action is from the United Mines west into Clifford, dipping at an angle of about 45° east. This heat has risen to about 120°, but it is evident that there has been no fire. Should there be fire below in this lode, and it contained such an amount of sulphur, it must have shown sulphur in the water assay. Then, I say, the seat of this heat is about the heart of the deposit of ore. Heat works under a law, like every other thing. The law of heat is its being so liberal that it cannot keep its own, and it is continually parting with it to every cold rock near. Then I take the centre of action in this mine at (say) 150 fms. from the surface; there the heat is 120°. Then take the heart of the ore at (say) 100 fms.—that is 50 up and 50 down where the great heat is generated. Then look at this heat there at 120°, and by the time it got up 100 fms. it would have parted with its heat through 50 fms. of cold rock. Then, supposing it had given half to the 50 fms. of cold rock which it is bound to do, it would be reduced to an average mine temperature. This may be proved near enough by going into the 100 and the 50 fms. levels at Clifford, over the hot point, and see what the temperature is there. This would be found to solve my problem. Then, I say, the heat will not radiate far downward, heat having a tendency to ascend. The heat from the

The superintendent refers to the limited ore ground now left in the upper levels of San Pantaleon, and adds: "With increased anxiety, therefore, do we look for a lasting improvement in the San Felipe and San Antonio levels, together with the intermediate ground, in order to augment the ore returns. The deep shaft communication with Taylor's shaft, it is confidently believed, will be accomplished at latest by the middle of next month; this done, we shall immediately be enabled to cut through the No. 3 cross-course, and thus commence an efficient haulage route to the eastward. This may be expected to result in a successful success in the San Juan level, and will be included between the two cross-courses proved rich throughout, which cannot be said of the deeper levels. In San Carlos, from the shallow adit, 16 tons 16 cwt. of ore were extracted last month, at the improved average yield of 75¢ cwt., equal to 1319 cwt. of

silver, which cannot be considered as satisfactory, and leads confidently to the hope that in the deep level La Esperanza productive ore ground will be opened up by further driving under the former to the eastward. The cross-cut now being vigorously carried south into the western hill will, it is believed, reach the lode during the present month. In the mine now sinking on the south, or Duarte's lode, an improvement has been made since the date of the agent's report, the vein having become more ore. A sample assayed to-day gave 225 ozs. of silver per ton. The 24th conducta, expected to consist of 25 bars of silver, was to be despatched to Guatemala on Oct. 6, estimated to produce \$20,000. Dr. Eillery concludes by expressing his belief, that by a vigorous prosecution of the mining operations in the San Carlos district, coupled with a trial of the eastern ground of San Pantaleon, works which he earnestly recommends being continued with energy, the temporary gloom will soon be dispelled, ending in the re-establishment of the company's prosperity.

ALTEN AND QUENANGEN.—Oct. 22: **QUENANGEN.** It is rather more than a week since we last heard from this place, when no material change had taken place in any of the barzains. The general prospects continued of the same cheering description. At Cedar's Mine the operations were being carried on in the usual manner. The side slope in this same working, looks much as before, the lode being 5 feet wide, with about 3 tons of ore per fm. Owing to the great expense of clearing the stuff from the lode, the south, part of the mine, we have left the same to accumulate for the last two months, until the adit was holed, when it could be brought to the surface for less than half the cost. We are now engaged fixing a tramway through the cross-cut to the top of Carr's rise, which will be finished in a few days, and when completed our facilities will be excellent, or all that can be desired for commanding these places. The slope in No. 1 working yields about 3 tons of ore per fm. Since our last we have been stripping down a piece of lode against the footwall, which is mostly composed of quartz, but contains a fair intermixture of ore. The two 5 fm. level foot slopes look very promising, where the lode is 7 ft. wide, with fully 3½ tons of ore per fathom. In the 5 fm. level north the lode is from 5 to 6 ft. wide, composed of quartz and calc-apatite, with good specimens of ore intermixed. The size has been good for the past fortnight, but until the proportion of quartz somewhat decreases we do not expect to find ore holding with any regularity, having generally experienced the contrary (very changeable lode) under similar circumstances. The workings above the 5 fm. level continue to yield paying work, where the lode is equally large, but, as hitherto, the ore is much disseminated through the matrix. Now that we have several hands at our disposal, relieved from Carr's and the 10, we purpose exploring some of the ground above the 10 south, where the lode yielded such good results some three or four years since. The present roof shows rather an unsettled appearance, but we feel sanguine that ore will be again found above. About 60 fms. south of the railway, at Bergmeister's shaft, we have begun a winze in the 10, which has two objects—to form our sump, and explore the lode at greater depths hereafter. We find some good ore very intermixed, but have not yet cut the footwall of the lode. We have set three pitches in back of the 10, in which the prospects are promising. All other matters here progress much as usual, and I may add, most satisfactorily.

UNITED MINES.—At Ward's we frequently meet with good bunches of ore in the lode, which is about 4 ft. wide and looks promising. The pitches at Woodfall's also look kindly, where the lode is 2 ft. wide, with gossan and yellow ore intermixed with tolerable regularity. The winter has set in unusually sudden and severe, all, or nearly so, of the present month being either very stormy, accompanied by heavy falls of snow, or extremely cold, the thermometer at times being 16° and 17° (C) below zero. This, of course, completely puts an end to all our dressing and other surface work, so that portions of the produce have to be stocked as usual until another year, but still as much as possible will be got ready for the smelting-house; and, although we cannot say exactly as yet what the result for October will be, we think you may reckon on 14 tons, or upwards, of copper, and are led to hope will not be thought bad, considering all circumstances.

GELLIVARA.—The report of Mr. J. H. Tolme, the engineer, states that the property of the company consists of 1,250,000 acres of land, more or less, in a state of forest, in the county of Norbotten, stretching from Lulea, Pitea, and Rana, three important ports on the Gulf of Bothnia, to Gellivara and Quilek, in Lapland, a distance northward of about 170 miles, by a breadth of about 70 miles; upon this property there are at present 11 saw-mills, four forges, and two blast-furnaces. The furnaces are situated very conveniently with regard to the charcoal forests, together with the waste wood of the saw-mills; an almost inexhaustible supply of fuel may be obtained for consumption in the manufacture of metals. The minerals which the company possesses are principally in the mountain at Gellivara, and the richness of this deposit is obvious on inspection. There are a great number of quarries opened on the face of the mountain, not more than 4 or 5 ft. deep, all containing masses of the purest iron ore. To utilise this large quantity of rich ore it is suggested that a railway should be constructed from a mine or quarry on the Gellivara Mountain, proceeding for a distance of 14 miles to the eastward, and then taking nearly a southerly direction, terminating on the River Lulea, at Norvik, which river will be navigable after the formation of the canals from that point to the sea. The Swedish Government have granted the company a subvention of 45,000, towards making the canals, which will form a large proportion of the cost of construction. Mr. Tolme proposes to work the railway and canals during five or six months of the year, and to bring sufficient funds to keep the furnaces at work all the year. He considers the estates generally capable of great development, and that the opening of the railway and canals will, in his opinion, afford every prospect of good remuneration upon the capital to be laid out.

HALLENBEAGLE MINING COMPANY.

A general meeting of shareholders was held at the offices of the company, on Saturday. Mr. PINNER in the chair. Mr. E. KING (the secretary) read the notice convening the meeting, and the minutes of the last were approved. A statement of accounts for four months, ending with September cost, was submitted, from which the following is condensed:—

Balance last audit	£2009 14 3
June mine cost, merchants' bills, &c.	953 3 1
July ditto	1046 14 0
August ditto	1332 4 4
September ditto	1709 0 6
A 60-in. cylinder engine, &c.	1840 0 0
Discount on calls	200 7 0 = £8601 3 2
Call	6000 0 0
Copper ore sold	2067 5 11 = 8067 5 11
Leaving debit balance	£538 17 3

The agents' report was read, as follows:—

Nov. 11.—We beg to hand you our report of this mine, as follows:—Since the last general meeting we have cleared and secured the engine-shaft from the 36 fm. level to the bottom, which is 6 fms. below the 40; also cleared and secured the 40 fm. level from the engine-shaft east to Stone's shaft, which is 75 fms., and cleared the said level 30 fms. west of engine-shaft, which is very near to the present end. We have sunk Stone's shaft, on north lode, from the 40 fm. level, 7 fms., lode 2½ ft. wide, and sunk 35½ fm. for copper ore. The eastern shaft is sunk 9 fms. below the 36 fm. level, lode 1 ft. wide, and sunk 6½ fm. for copper ore. We have cleared Stone's shaft, on south lode, from the 36 to the 40, and cleared the 40 fm. level, 80 fms. west of said shaft, and sunk the said shaft 9 fms. below the 40 fm. level, lode 6 in. wide, producing stones of copper ore, but not sufficient to value. We have sunk the eastern shaft, on south lode, 3 fms. below the 36 fm. level, the lode still disordered by the slide. We have cleared and secured the old engine-shaft from the 20 to the 40 fm. level, which is the bottom. The footwall shaft is cleared and secured from surface to the deadpit, which is 50 fms., through broken ground, which required a quantity of timber. We have cased and divided the engine-shaft from surface to the 20 fm. level, below adit, which is 70 fms., and fixed footwall, with 100 fms. of engine-rods, 40 fms. plunger-lift, cut three eisen-plats, and fixed four sets of beams. There are six tribute pitches working on north lode, in the bottom of the 40 fm. level, west of Stone's shaft, to the engine-shaft, at an average tribute of 7s. 6d. in 11; four of these are worked as deep as the water, where the lode is 18 ft. per fm. Bowden's shaft is sunk 11 fms. below the 33 fm. level, on Reed's lode; the lode to the east and west ends is 15 in. wide, and worth 3½ fm. per fm., with a very kindly appearance. We have cleared the bottom 15 fms. west of the above shaft, below the 33 fm. level, lode looking well for copper ore. We purpose driving the 43 and west of Bowden's shaft, to get under the run of ore ground seen at this point. The winze in the bottom of the 33 is sunk 8 fms. below, lode 15 in. wide, producing stones of copper ore, but not sufficient to value. We have cleared and secured Reed's engine-shaft to the bottom, which is the 43 fm. level, and is now available for drawing; the lode in the 43 fm. level, west of said shaft, is 2 ft. wide, and worth 9½ fm. per fathom for copper ore; the lode in the 43 and east is 6 in. wide, and worth 4½ fm. per fm. We have three tribute pitches working in the back and bottom of this level, which are yielding a fair quantity of copper ore; the prospects at the bottom of this part of the mine are very encouraging. The new 60-in. cylinder engine is now complete, and is of ample power to fully develop the mine to a considerable depth. Looking at the course of ore gone down below the 44 fm. level, between Stone's and engine-shafts, which is 75 fms. in length, and is now down to water, and also the shaft of ore between Stone's and western shaft, below the 36, which is 50 fms. in length, the operations should be carried out vigorously, when there is every chance of great success.—J. EDWARDS, E. RICHARDS.

The CHAIRMAN stated that the accounts last submitted had been duly audited and found correct. He congratulated his fellow-shareholders upon the greatly improved position and prospects of the mine, and especially referred to the discoveries which had been made during the last week at the bottom of the mine. In the presence of so many mining authorities as were present he spoke with some diffidence, but at the same time he thought they would agree with him in the opinion that not only had great difficulties been displayed in the placing of the mine in an efficient state of working, but also that the general prospects of the property were as encouraging as the most sanguine could desire. (Hear, hear.) He concluded by moving that the accounts should be passed and allowed, and the report entered on the minutes.—Mr. RAWLINGS seconded the proposition.—Mr. SAMSON WATERS (of Whitehall, Cornwall) considered each shareholder had reason to congratulate himself upon being interested in a mine of such unusual promise.—Mr. PERKMAN (of Redruth) thought that they must all be agreed upon this point. He felt confident they had only to work economically and energetically for a short period to bring Hallenbeagle into a profitable condition.

Mr. THOMAS, after having examined some of the merchants' bills, referred to the price charged for the timber for the rods, supplied by Messrs. Griffiths and Co., of Grenver.—The SECRETARY said that the instructions to the agent at the mine were to set all the materials in the best possible way, and to decide whether the materials could be obtained from them at the lowest prices. As regarded the particular bill referred to, he might mention that the agent told him he had considered difficulty in obtaining the timber required.—Mr. RAWLINGS (Messrs. Harvey and Co., Hayle) said

he knew nothing of the Messrs. Griffiths nor of the rods, but he knew that since the American war there had been no pitch pine imported, and red pine timber was not to be had at anything like the price referred to.—Mr. GOSCE said that the Danzig timber was very superior.—Mr. RAWLINGS thought 4s. per foot was a reasonable price, and he did not believe the agent could have done better; indeed, he believed his firm had paid the same.—Mr. FRANK suggested that the estimate made by the agent at the last meeting, with reference to the expenditure of the four months, should be read.—The CHAIRMAN, referring to the estimate, stated that the expenditure was computed at \$2561, including the balance against the mine at that period. The expenditure now shown, after deducting 2001, for discount on calls, was \$4601, up to the end of September. He considered it should be mentioned, however, that the agent estimated that during the same time the returns would realise between 14001, and 15001, whereas they had actually brought 20671. Everyone must acknowledge that it was exceedingly difficult for any agent undertaking a work of this kind to give an accurate estimate as to what the cost would be.—Mr. RAWLINGS considered that they had great reason to be perfectly satisfied with the expenditure with which the engine had been erected.—Mr. SAMSON WATERS said that the engine would not be required for some time to come. At present the deepest point was only 49 fms. below adit, and there was no water in the mine.

A letter was read from Mr. Husband, who had recently inspected the mine, to the effect that, by the judicious expenditure of 5001. per month, independently of the returns, for nine months the mine would be brought into a most excellent position. The letter also mentioned that the agent and engineer deserved praise for the expeditious manner in which all the work had been carried out.

Mr. THOMAS thought it was certainly true economy to have a large engine and pit-work.—Mr. SAMSON WATERS enquired if the company possessed the lease of the mine?—The CHAIRMAN said that the Hallenbeagle Mine was established, in March last, as a separate adventure, both that and Great Wheel Busy were included in the same lease, granted to five individuals, two of whom were abroad, and one was dead. Immediately after it was arranged that the set should be divided into two separate adventures—the Hallenbeagle and Great Wheel Busy—the committee put themselves in communication with the agent of Lord Falmouth, in order to obtain his assent to the division. It was then suggested that a lease should be granted, but Mr. Mitchell wrote, and said that the matter had better be deferred for some short time, in case the adventurers might deem it expedient to make another division, so that it would be more convenient to have the whole of the lease at once. There was one legal difficulty in the way, which was that Lord Falmouth could not grant a new lease until the old one had been surrendered. He then read from the minute book the resolution passed, as well as the terms upon which the Hallenbeagle adventurers held their property, and said he had no hesitation in stating, as a lawyer, that that was as perfectly binding in equity upon the Wheel Busy adventurers as if there were an absolute assignment to the parties.

The SECRETARY mentioned that the lease would not date from the expiration of the old one, but from the present time.—Mr. THOMAS was perfectly satisfied with the resolution, without any lease at all.—The SECRETARY said that a separate receipt was given for the dues, which were 10s. per month.—Mr. SAMSON WATERS enquired how long it would be before the old lease expired?—The SECRETARY said that the old lease, for 21 years, was dated 1855.—Mr. SAMSON WATERS said that the only thing which had deterred him from taking a much larger interest in the company than he had at present was the doubt which he had heard expressed with regard to the lease, but the explanations which had been given were completely satisfactory.

The accounts were passed and allowed, and the report was ordered to be entered on the minutes.—The CHAIRMAN said the next question was one of finance. The committee had fully considered the question, and were unanimously of opinion that a call of 5s. per share should be made, which would be sufficient to pay off the debit balance, and to carry on the operations for the current four months. A resolution to that effect was carried unanimously.

Upon the question of the appointment of a committee some discussion ensued, the Cornish shareholders considering that as a large number of the shares were held in the county they should be represented upon the committee, to which no objection was raised. It was eventually unanimously agreed that the retiring committee should be re-elected, with the addition of the names of Mr. Samson Waters and Mr. Luke, and that the next meeting be held on the 15th.

Mr. PERKMAN suggested, as there were 150 shareholders in Cornwall, representing a large number of the shares, that regulations should be inserted in the minute-book.

The SECRETARY promised to see the suggestion carried out.—It was agreed that the special meeting, of which due notice had been given to each shareholder, should not be held, the object in view having been satisfactorily attained by the addition to the committee.—Upon the proposition of Mr. PERKMAN, seconded by Mr. SAMSON WATERS, a unanimous vote of thanks was passed to the Chairman, and also to the committee and secretary.—The CHAIRMAN acknowledged the compliment, and stated that there had been a considerable amount of labour in bringing the mine into its present state, but he hoped and believed that their exertions would be repaid by the possession of a permanently profitable mine.—The proceedings then terminated.

TRUTH'S ECHOES, OR SAYINGS AND DOINGS IN MINING.

Although the Mining Share Market presented little improvement previous to, and unconnected with, the usual fortnightly account, which took place on Tuesday, there has been since more activity, and a moderate amount of business transacted, leaving a more buoyant tone for the coming week.

WHEAL SETON have changed hands, but prices have fluctuated.—**WEST SETON** continue remarkably quiet at present quotations.—**CARRODS** have been fairly dealt in, and continue in request at improved rates.—**EAST BARRETT** have changed hands, and still sought for at lower rates.—**WEST BARRETT** and **WHEAL BARRETT** find buyers at nominal figures.—**TINCROFT** have been dealt in, but prices have fluctuated.—**EAST CARN BREA** have not been active, although transactions have taken place.—**GREAT LAXEY** are in good demand, with a tendency to further advance.—**WHEAL BULLERS** have been done at lower rates.—**EAST GRENVILLE** have been extensively and daily dealt in, but prices have varied.—**WHEAL GRENVILLE** are in better demand, and likely to improve.—**NORTH CROFT** have changed hands at lower rates.—**NORTH BARRETT** are in demand, and prices improved.—**EAST LOVELL** have been dealt in, and, although prices have slightly varied, they left off much higher, with a strong tendency to further improve.—**GREAT FORTUNE** and **TOLVADEN** are offered at nominal figures.—**PROVIDENCE** and **MARGERY** find buyers at minimum rates.—**MARGARETS** continue dull.—**EAST VOR** and **STREYNE** METAL have been enquired for.—**EAST CARADON** have been freely dealt in, and, from enquiries made, are likely to greatly improve.—**MARKE VALLEY** are quiet, at quoted prices.—**WEST CARADON** are enquired for, at nominal prices.—**TRELAWNY** and **MARY ANN** are in fair demand.—**KELLY BRAYS** are rather quiet.—**HINGTON DOWNS** are sought for at buyers' prices.—**EAST RUSSELL** are in better demand, and prices have advanced.—**LADY BERTHA** have been dealt in, and continue in request.—**CARRODS** are quiet, at minimum prices.—**NORTH DEVON** and **FRANK MILLS** are in good request, consequent on recent improvements.

EAST CARADON.—The 70 and 80 fathom level ends east have improved during the week, as will appear by the following report:—The counter lode in the 70 east is worth 12½ fm. per fm., and in the 80 east 18½ fm. per fm.; the other ends are poor. The new lode, in the 60 east, is worth 10½ fm. per fathom; the 60 west, 7½ fm. per fathom; the 80 east, 5½ fm. per fathom; and the 70 east, on the south lode, is worth 5½ fm. per fathom. The monthly sale of copper ore, on Thursday, amounting to 470 tons, realised 184½. **MARKE VALLEY** sold 480 tons, realising 187½. **7A.**—**NEW BACH** 70 and 80 fathom levels have been improved during the week, and prices improved.—**EAST LOVELL** have been dealt in, and, although prices have slightly varied, they left off much higher, with a strong tendency to further improve.—**GREAT FORTUNE** and **TOLVADEN** are offered at nominal figures.—**PROVIDENCE** and **MARGERY** find buyers at minimum rates.—**MARGARETS** continue dull.—**EAST VOR** and **STREYNE** METAL have been enquired for.—**EAST CARADON** have been freely dealt in, and, from enquiries made, are likely to greatly improve.—**MARKE VALLEY** are quiet, at quoted prices.—**WEST CARADON** are enquired for, at nominal prices.—**TRELAWNY** and **MARY ANN** are in fair demand.—**KELLY BRAYS** are rather quiet.—**HINGTON DOWNS** are sought for at buyers' prices.—**EAST RUSSELL** are in better demand, and prices have advanced.—**LADY BERTHA** have been dealt in, and continue in request.—**CARRODS** are quiet, at minimum prices.—**NORTH DEVON** and **FRANK MILLS** are in good request, consequent on recent improvements.

WEST CHIVERTON continues to look remarkably well. The 80, west of Hawke's shaft, on Williams's lode, is worth 30½ fm. per fm., and a winze has been commenced in the bottom, on a lode valued at 100½ fm. per fm. The 70 is large and improving. **SOSANNAH's** shaft, on the same lode, is worth 25½ fm. per fm. There are other important operations on the north lode, which are most promising features. **OLYMPIA** in the 80, on the north part, the eastern end is worth 30½, and the western 20½ fm. per fm. A winze has been sunk from the 70 to the 80, averaging 40½ fm. per fm. A winze in the bottom of the 70, and a rise in the back of the 80, are worth together 40½ fm. per fm. On Elizabeth's lode, in the 80, they have gone through a bunch of lode for 20 fms. in length, averaging 35½ fm. per fm., and a winze sunk from the 70 to the 80, worth from 15½ to 40½ fm. per fm., and now sinking a winze below the 80, on a lode yielding 40½ fm. per fm. There are several other points to which operations are being directed that are expected when completed to contribute largely towards future supplies.—**CHIVERTON.** The operations here have been continued for some time past, and the difficulties which have been met in the clearing of Murray's shaft to the 50; but it is gratifying to learn that the numerous obstructions have been removed, and are now overcome, and the shaft fully secured and in good working order; and there is every reason to believe that similar difficulties will not be met with below that point. They have commenced driving west to communicate with Cockney's shaft. In driving east from the latter shaft, on a very promising lode, 3 feet wide; they have within the last few days opened some productive ground, yielding from 6 to 6½ cwt. of lead per fm., with every appearance of an important discovery not far off.

HALLENBEAGLE the prospects and considerations of the most encouraging character, and the prospect of a most successful future. The operations here have been continued for some time past, and the difficulties which have been met in the clearing of Murray's shaft to the 50; but it is gratifying to learn that the numerous obstructions have been removed, and are now overcome, and the shaft fully secured and in good working order; and there is every reason to believe that similar difficulties will not be met with below that point. They have commenced driving west to communicate with Cockney's shaft. In driving east from the latter shaft, on a very promising lode, 3 feet wide; they have within the last few days opened some productive ground, yielding from 6 to 6½ cwt. of lead per fm., with every appearance of an important discovery not far off.

WHEAL BULLER.—The loss for the quarter is shown at 6001; this increase has been occasioned by repairs, alterations, and new work for the stamps-engine and machinery, as well as flat-rods and pit-work, which will not probably be required again. There is no marked difference in the present position of the mine compared with the last quarter.

EAST LOVELL.—The new shaft is nearly down to the bottom of the diagonal shaft, which shaft, in sinking, varied from 100½ to 200½ fm. per fathom, and when suspended, it was found to be 100½ fm. per fathom. The new shaft, the lode was worth full 150½ fm. per fathom, upon which they will shortly resume sinking; this, together with the course of tin left standing, will put the mine in a far better position than ever known before. The lode in the south shaft, sinking below the 28, continues to improve, and now worth upwards of 60½ fm. per fathom, and looking well for further improvement. The Turnpike shaft, which is 120 fathoms further north, is likely to open out tin ground as valuable as any other portion of the set. The lode on which they are driving has very much improved this week, and worth upwards of 25½ fm. per fathom, and improving. This lode is the continuation of the old East Lovell lode, which, in former workings, has been improved quantities of tin. This addition of a most immediate return is looked upon as likely to be of inestimable value, inasmuch as the working will require no increase of pumping-machinery. The other points of operation are without change, and from

present prospects there is little or no doubt but East Lovell will become a great, productive, and permanent mine.

GREAT WHEAL METAL.—In clearing up the old shafts and former workings preparatory to more extensive operations, they have made two important discoveries in the east and west shafts, in the bottom of which they have very good lodes for tin, such being estimated worth 15½ fm. per fm. The former shaft is down 10 fms., and no inconvenience by the influx of water likely to impede a rapid development of the discoveries.

At **BEDOL-AUN** they are looking very promising, and the level of an improving character. In the 35 they have made an important discovery by cutting a fine branch of lead, and the ground looking more congenial for ore than ever seen before. This discovery will augment the parcel of lead intended for sale in about three weeks hence.

NORTH DEVON.—Attention has frequently been drawn to the prospects of this mine, and there is very little doubt but that it will shortly take a very prominent position among the most productive lead mines of the two counties. The counter lode, which was found so rich in the adit level, and the same lode valued at 100½ fm. per fm. under the 10, has recently been intersected in the 20, where it was worth from 40½ to 50½ fm. per fm., as far as opened upon, are points which few mines can exhibit with so little ground developed. The same lode is daily expected to be cut by the 20 cross-cut, and should that point prove as valuable as the level below, of which there is no reason to doubt, a rich lode will be then proved for 30 fms. in height. This will be exclusive of the middle lode, which is returning fair quantities. By information received to-day (Friday), the 30 is yielding large quantities of lead, and likely to prove as rich as the 10, which will worth 100½ fm. per fm., and the 20 cross-cut is near the lode, as the water issuing from the end has greatly increased.

JAMES LANE.

From Mr. JAMES CROFTS:—In sympathy with the buoyant state of business on the Stock Exchange, the Mining Market is getting daily more and more into a more cheerful condition, excepting that now and then a few hours of depression come over it, a fact that records much in its favour when the very low price of metals is considered, but more particularly for tin and copper, whilst, although in limited demand, exhibits only a small shade of depression, as is shown by the last sales of ores reported in the Journal, page 797, from November 4 to 10, amounting to 1750 tons (including, however, 660 tons from the Miners' Mines), and the remainder of the produce of 27 Welsh Mines and the North Devon, the highest price obtained per ton being 17½ fm. 6d., and the lowest 12½ fm. 6d., whilst the average of the whole results in 13½ fm. 6d., in addition to this, Miners and Great Laxey sold 402 tons of blende, averaging 4½ fm. 6d. per ton. With regard to one of the other causes which operate on this market, the general opinion tends towards a further reduction in the value of money, and although the Bank may not see fit to reduce the rate to 7 per cent. this week, such a step is inevitable, when it is considered that discounts for good bills can now be obtained in the open market at 7½ per cent.; and although the Bank of England may be slow in the adoption of measures which would tend to revive, or at least encourage to a certain extent, the introduction of further insane joint-stock schemes, the directors are too thoroughly conversant with business to sacrifice a sound commercial principle by depriving themselves of a participation in discounts, which they can only obtain by conforming the Bank rate to at least an approximation to the value of money elsewhere.

LAXEY (late Wheal Fanny, near Bridestown, Devon) was subscribed for nearly a year since in 24 shares, at 125½ each, equal to 3000½, which sum, being all paid down, was reserved as capital to work the mine, the first item of expense being a steam-engine, now in operation to clear the mine of water and debris, and as this will be accomplished, it is supposed, within a month of the present time, the mine will then be constituted in 3000 shares. Of the original 125½ paid not more than three or four shares have been parted with, and although another share or two might perhaps be procured, it could only be at a handsome premium. A favourable inference of success in the workings derived from the fact that Capt. Jas. Richards, the managing agent of the Devon Great Consols, has reported upon it in most favourable terms, it being his firm belief that there is an abundance of good ore in connection with the splendid indications presented at the surface; and thus these shares ought to be a temptation to the capitalist.

The following, from an intelligent agent resident in the lead mining district between Holywell and Wrexham, will be read with the interest that should attach to all disinterested information:—**CERN CILICEN.** In the 80 fathom level, at Susan's shaft, driving east, there is an improvement; the lodes are the same width as before, with more, some clay (important for the locality, in which much of the lead preliminary to lode (unimbedded), and less shale, which is inimical to lead, and masses of rock coming in with the lode; on the whole, the change is very much for the better. Sold 1½ tons of lead, at 14½ fm. 6d., and nearly 2 tons of blende, at 5½. **N.B.** 50 tons of blende would have fetched 3½, or 4½, per ton. **PENRYN LAXEY** is in order, the most congenial for ore. A very good mine. **CENTRAL MINERA.** The sump, or bottom of the mine, ran together. It has now been cleared. They expect in a few days to come on the lode, and there was there before the said accident. **MINERA UNION** (privately worked), and therefore not in the list in the Journal) are selling 30 tons of ore per month. At the late annual meeting they made a dividend of about 7 per cent. on the capital. A call of 2s. per share was made on the 15th inst., making 2½ ds. out of 8½ (limited).

BEDOL-AUN.—This mine progresses daily. On the 10th inst. they cut a fine bunch of lead in the forebush of the 70 yard level, and more congenial ground for lead was never seen. On the previous day there was also a report to the effect that the stopes in the bottom of the level, north-east on the Irynia vein, had a most promising appearance, being full of small branches yielding a little ore. They would commence dressing the lead this week, to get it ready for the Saturday before the sale, which would take place on December 8. **EAST WHEAL RUSSELL** has been long and anxiously expected to come in success—namely, the cutting such a course of ore as would convert it into a divided mine, and the event appears not far off, the "capels" of the lode in the 130 having been, it is reported, cut into, and the shares in demand at 5½, 6. In about 12 years there has been expended on this mine nearly 40,0001. in calls, exclusive of a long course of sales of ore—one of the prominent instances of British perseverance in the matter of mining, during which the shares have been high as 38 or 35, and as low as 2½, 3, whilst the management, or secretaryship, has remained unchanged. Should the hopes now raised be realised, it is intimated to those whom it may concern that the shares may soon be twice the present value, or even much more.

P.S.—FRIDAY, 4 P.M.: **EAST LOVELL** have risen to 14½, 15½, on a reported improvement in the mine, and the market very active—chiefly buyers. An important improvement is also reported in **SOUTH EXMOUTH**: see Mr. A. Murray's report, dated 16th inst. **EAST RUSSELL** advancing, and called on the market 5½, 5½.

From Mr. WILLIAM LILEAN:—Be the recovery of a patient after a long and severe illness ever so decided and unquestionable, it is some time before the system recovers its proper tone and strength, and still longer before the patient evinces the spirit and energy by which he was previously characterised. A long-continued inactivity begets not only bodily lassitude but mental apathy, and it requires a considerable effort to shake them off. Not very unlike this in its effects is any serious and protracted disturbance that takes place in the monetary system. It is not only those parts of it that are immediately affected by the disease that suffer; those which remain unaffected in view of the suffer, more or less, through their relationship and sympathy with the diseased part, and the unfavourable condition of mind that follows is often more difficult to overcome than that which is produced by the direct action of the disease. The monetary system has been for some months affected by a very serious visitation, consequent upon an excess of indulgence, if one may not say a course of profligate expenditure and reckless extravagance; and not only the extravagant and the profligate have suffered, but many who had kept themselves within the limits of the strictest prudence and propriety have suffered with them. An immense amount of capital, made up of comparatively small sums, has been kept in an unproductive condition, and the holders of it have suffered accordingly. A man with 2001. or 3001., which should have been prudently and profitably invested, for a longer or a shorter period, dared not venture, lest he should lose the greater part, if not the whole, of it, whenever he might want to realise; and thus what ordinary circumstances would have been a source of income has been altogether profited. There is no reason why this should continue to be so. The causes of the monetary embarrassment and disorder with which we have been visited are, beyond all doubt, removed—nearly, if not quite; and as far as it is possible to prejudice the future by a careful examination and cautious estimate of what exists in the present, we may say that we are in no danger of being revisited by them. Money is to be had upon easier terms than it was a few weeks ago, and there are causes in active operation, the are calculated to make it still easier of acquisition, as well as to allay any apprehensions of such extensive mischief in the commercial world as would prejudicially affect the money market. The funds maintain their large recent recovery, in spite of the announcement of the Egyptian loan, and the movements of gold show a continuous balance in favour. The Bank account published this (Friday) morning is still more favourable than it was last week, the coin and bullion having increased to 13,116,2401., and there serves to 8,207,9011., being, together, nearly a million and three-quarters in excess of what they were when the Bank rate of interest was 18½, and only 5 per cent. although for some reason at present inexplicable, the Bank postponed any further reduction in the rate on Thursday last. That the reduction must take place almost immediately is certain, for money is too cheap outside to enable the directors, had they any wish to do so, to maintain the present rate for many days longer. In the meantime, everything is much easier. Timid or over-cautious persons who have money to invest, but who could not be induced to look at even the most tempting offers a few weeks ago, are waking up, and looking about them, and enquiring as to what they may venture upon. They have lost much by their excessive caution; it is to be hoped they may not lose still more largely by nursing their hesitation until everything has got into a more active and adventurous condition, who will, as they have a right to do, make those who let "I dare not wait upon I would," pay the penalty of their procrastination. The fluctuation in the prices of railway shares has been less than in almost any other species of investment, but, as the good dividend-paying mines, as also in promising and progressing mines, are yielding much higher prices than they might have been purchased for two months ago. The months hence they will, in all probability, be still higher, the tendency of money being downwards, as it is likely to continue, if no great disturbing cause, not at present known, to exist, occasions a change.

I have called attention several times lately to the opportunities which presented themselves of purchasing shares in mines at prices very much below what they were really worth, reference being had to the dividends realised, or to the character of the enterprises. Referring to my former communications, for the reasons I deem conclusive in favour of some of them, I would this week call especial attention to a mine which has for many months urged upon purchasers, whether for temporary or permanent investment, as especially worthy of their attention—I mean the **GREAT LAXEY**, the earnings of which, to say nothing of the very large reserves, have raised the price of shares from 4½ to 16½, 17, but which would be, beyond all doubt, cheap at a much higher price. Scarcely a fortnight passes without some further improvement being reported in its already rich condition. On the 15th inst. Capt. Rowe reports that the 110 fm. level, driving north, the lode has increased in size and value, and is nearly 6 ft. wide—it is worth 120½ fm. per fathom; while the stopes in the roof hold the former value of 200½ fm. per fathom. The reports of the other parts of the mine are scarcely less favourable. Within a fortnight or three weeks they expect to cut the lode level the 120, in the north ground, where the cross-cut is now driven, the lode containing an increase in strength and value in the 130, being, in the 145, 6 ft. wide. In the 155 they are pushing on, and will shortly have opened out an immense piece of ground, on a wide lode, rich for jack and lead. The south ground also reports well, especially for copper; in fact, the mine promises to become what I have long anticipated—one of the most valuable mines in the kingdom. I may add to what I have said that they have sold another 100 tons of lead, at 25½ lbs. 6d. per ton (making 200 tons in 41 days), have sampled 200 tons of blende, which may be looked upon as an incidental profit of no mean account.

The **GREAT SOUTH CHIVERTON** is progressing as favourably as the most sanguine could have expected, as will be seen by a reference to Capt. John Nancarrow's last report. They approach the lode the ends of the adit, both east and west, and present indications of highly favourable character. The **NORTH CHIVERTON**, which belongs to the same family, continues to open out most satisfactorily for both lead and blende, and they are drawing for sampling at the end of the month. In the **EAST RUSSELL**, the lode which they were driving to cut the 130 fm. level cross-cut north has now been cut into 2 or 3 feet, and presents a very promising appearance, while all the other points maintain their valuable character. The **EAST LAXEY** will, I have no doubt, turn out a rich mine, and who are disposed to speculate, under very promising indications, will do well to purchase a few shares while they may be had at a low price. I may say the shares of the **GREAT LAXEY** and the **EAST RUSSELL**, both as to the value of the mines and the prospects of the mines. The **BEDOL-AUN**, the **EAST TARRANT**, and the **NORTH MINER** are all mines that appear to be so well managed and to be so favourably progressing,

Mining Correspondence.

BRITISH MINES.

shares at their present prices may be strongly recommended as likely to become much more valuable within a reasonable time.

From Mr. EDWARD COOKE:—A moderate amount of business has been done during the week, and confidence in the future relative to financial affairs is gradually being restored. The metal markets are all assuming a more healthy appearance, and in the event of the Bank rate going still lower there will be a great reaction in the price of both tin and copper, and consequently the price of gold mine shares will be favourably affected. Several mines may be bought into now with great safety for a rise in price that will certainly take place in the coming two or three months. A large business has been done in GREAT WHEEL VOR shares. The buying has not been on speculative account, but principally for investment, and a very good investment it would appear to be. This property (Great Wheel Vor), although so rich at the present time, would appear to be only just now in its infancy. The very talented Truro Correspondent of the Journal alluded slightly to this wonderful property on Saturday last, and it would be interesting if he would give some information relative to the Great Vor district generally. As he justly observes, that when two such great mines as Great Vor has been, and the Wheel Metal part indicates to become, are found in a district under similar definite conditions, great and successful results may be fairly expected in the surrounding district. It is this that encourages such great expectations from East Wheal Vor properties. A moderate depth is attained. Some 12,000 ft. of tin has already been raised, but the greatest deposit of tin is expected to be found at the junction of the Old Wheal Vor lode and Smith's lode at or about the 100 ft. level. In the shaft sinking the nature of the ground and stratification is identical to that in the adjoining mines, Great Wheel Vor and Wheel Metal. The large number of shares that were lately thrown on the market have been absorbed, but even now they are selling below par, with between 4000 ft. and 5000 ft. in hand, and with ample plant all paid for, so that the prospect of calls, even if any are ever required, are very remote. CLIFFORD'S VOR has very much improved, and the shares have advanced about 5 ft., with an abundance of business. The adjoining mine, NANTOL, owing principally to an absence of business in the shares, has receded in the market value. It is a good share to buy at present price. East Grenville shares have been largely dealt in, but the price has receded. The lode in the 75 fathom level has been a great disappointment to all who are interested in the mine. From the favourable character of the lode in the 55 and 65 great expectations were entertained of the same lode in the 75 fathom level. The character of the immediate district of East Grenville, west of the great cross-course, does not justify any expectation of very favourable results.

At CHIVERTON Moor, the splendid new 70-in. cylinder engine, with all its appointments, has been completed, and is now doing good duty. This mine adjoins West Chiverton, and when it is remembered that the richest part of this very rich mine is in the direction of Chiverton Moor, it must, I think, be conceded that the chances of the latter becoming rich also during the next year are very great indeed, and seeing that the shares are now only about 3 ft. to 4 ft., with 3 ft. paid, there is a good prospect of their going several pounds higher in a short time. There are only 3000 shares, with some 4000 ft. of tin in hand, and engine, &c., paid for. According to present appearances there will be an early discovery of lead upon the rich West Chiverton lode, which traverses Chiverton Moor itself. East Wheal Lovell shares have been largely dealt in. The principal buyers are parties in the immediate locality of the mine. The completion of the shaft, when fully accomplished, will be a grand object for the future of the mine. This mine is now nearly completed, at an outlay of both time and money, the whole of which (I am authorised in saying) be delayed by the returns of the mine in a comparatively short time, after which good monthly profits will be resumed. I am justified in saying that the mine is very rich, and that the profits will be large when the various points are in full operation. Before the end of the current year shares will attain a high figure. NORTH CHIVERTON: I find myself constantly writing about this mine. It arises from the fact of the thorough personal knowledge I have attained of its merits, which are really second to none in Cornwall. The reports I constantly receive from all quarters relative to North Chiverton quite justify the opinion in asserting that no mine in the county of Cornwall has been more economically laid open, nor have the results been more satisfactory. Within a few months from the engine going to work several parcels of blende will have been sold, together with some tons of lead. More of the latter will soon be raised when another level is reached, and the upper levels drained. By an assay made of the blende, it is found to be of a very rich quality, much above the average produce of the county, hence the desire on the part of the buyers of this article to obtain the produce of North Chiverton Mine. The shares are well held, by highly respectable parties, as an investment. No attempt has been made to cause any rise in the price by any means, but the mine has been laid open to the public simply upon its real merits, and upon them alone I recommend it to anyone who desires to invest money in a sterling good property. Before concluding my remarks, I should be void of all feeling if I did not add my meed of respect to the memory of a late departed friend; and when I say friend, who is there that had the pleasure of his acquaintance that did not deem it an honour to be esteemed his friend? I may truly say that the whole mining community mourns his untimely death, and he has left a void that will not easily be filled up. Another victim to the high-pressure system, or, in other words, to an overwrought brain, has occurred in the death of Mr. W. J. Dunford. Only those who knew him personally can form the late opinion of the Herculean labours he had to perform; aye, and did perform, most efficiently for many years. But even with his robust manly frame of body and energetic mind, his useful labours were brought to a premature close, and to the grief of a multitude of friends; and I fear it will be a long time ere we look upon his like again.

From Mr. J. B. REYNOLDS:—Holders of Wheal Grylls, West Caradon, Wheal Margaret, Cock's Kitchen, Stray Park, Rosewarne United, and Tescorose, no doubt, very much regretting the low price of these shares. Instead of regretting the fact, let them consider the cause, and hold on; and those who pass by these mines because there is nothing doing in them should get reliable information, and act upon it. During the week there has been a fair amount of business done. With one or two exceptions stocks have been well sustained, and in some instances a considerable advance has taken place—Great Vor, East Lovell, Clifford, and East Russell have been in good demand at advanced prices, whilst in East Caradon, East Grenville, Grenville, West Chiverton, Chivert, Great Laxey, and East Vor there has been a good business. East Lovell has improved to 15 ft., and are attracting considerable attention. Clifford has advanced to 34 ft. 3 in. West Chiverton are firm. North Chiverton and Chivert meet with deserved attention. Great East Lovell is well spoken of. East Grenville are better on the inspection. The markets close with a most encouraging appearance, and no doubt during the coming week some important changes in the prices of the various mines will have to be recorded.

From Mr. PETER WATSON's "Mining Circular and Share List" (No. 349, Vol. viii, No. 18):—An easier Money Market, and a tendency to an improvement in the value of metals, have brought about a material and favourable change in all descriptions of securities, but more especially in mining stock. The writer more gladly refers to this encouraging state of things, because it so fully confirms the opinions expressed in these pages, at a time when almost everyone viewed everything in the gloomiest of aspects. Although the healthy reactive current will, doubtless, be chequered and temporarily checked, yet those who avail themselves of the present opportunity of purchasing an interest in good bona fide mining stock will most certainly have no reason to regret having done so. An interest can now be purchased in several dividend or progressive mines, at such prices that will yield a return of 10 per cent. in many cases, double the amount of capital invested, but the over-cautious investor may allow the opportunity to pass away, to return only, if at all, after a long period of time. Such of my friends who followed my counselling during the past few weeks have already seen that the advice was not given at random, but based upon a sound commercial view of the then position of monetary affairs. It is true that the Bank authorities did not on Thursday reduce the official rate of discount, but that is clearly looming in the monetary horizon, and with cheap money, a better price for metals, and an increased confidence, there is probably before us a long period of prosperity.

Birth.—On Wednesday, the father of our old correspondent, Mr. J. Y. Watson, F.G.S. The deceased gentleman, WILLIAM WATSON, Esq., formerly of Adderstone House, Northumberland, and of St. Oystin, in the county of Essex, who has died in his 83rd year, was a member of an old and distinguished family (his mother a cousin of the first Lord Eldon), from which descended the celebrated Admiral Watson, who released the survivors from the Black Hole of Calcutta, and took the town from the Nabob, in January, 1757. Admiral Watson died at Calcutta while commander-in-Chief of His Majesty's naval forces in the India, in August of the same year, and a baronet in his ninth year, in 1760. The father of the deceased, William Watson the elder, of Adderstone House, had a younger brother, Capt. John Watson, who distinguished himself at the siege of Seringapatam, and died suddenly while in command of the garrison of Nottingham, in 1797, leaving an only son (first cousin of the deceased), the late Sir William Henry Watson, Baron of the Exchequer, who entered the army in early life, as a cornet in the 1st Dragoons; served through the Peninsular war, and then entered as a student at Lincoln's Inn. Sir William Watson was married to a daughter of the late Sir John Lubbock, and while charging the front ranks of the Welsh Guards a few years since, having married first a sister of Sir William Armstrong, and secondly a daughter of Mr. Hollett, of Lodsworth House, Sussex. The gentleman whose death we now record has left three sons—Mr. J. Y. Watson, F.G.S., Mr. John Watson, of George-yard, Lombard-street, and Mr. Napoleon Frederick Watson, of the firm of Watson and Cuell.

FATAL ACCIDENT TO CAPT. RICHARD PRYOR.—We regret to state that Capt. R. Pryor, of Liskeard, the well-known and efficient managing agent of Wheal Trelawny and other mines, met with a serious accident on Thursday evening, which has since terminated fatally. The deceased gentleman, who was much respected, was in the prime of life, being only 35 years of age, and was married about three months since. He was the manager of Wheal Trelawny, and for years was the principal agent at Holm-bush. He was a nephew to Capt. Pryor, of Redruth. —West Briton.

FATAL ACCIDENT AT STRAY PARK.—Two brothers, John and Alfred Williams, were working in the same ore, when a "stall" came away, and buried Alfred.

In the Norwegian mines a singular and striking custom is observed in paying the weekly wages of the men there employed. They all present themselves on the Saturday evening to the Inspector, who hears from each man the number of hours he has worked on the successive days of the week past, compares the total given with his own notes on the subject, and having settled the account, calls the miner, bids him turn round, and writes in black chalk upon his black back the sum due to him. Thus mysteriously numbered, the man has to go to the cashier, who also turns him round to look at the figures, and pays him without having a word to say. The method is an expedition one—two or three strokes of chalk settle the matter; it is prudent, for the miner has no chance of altering a figure in his own favour; and economical, for a brush removes all trace of the inscription, and the same black jacket is ready for the next Saturday.

YINCEBUDY IN IRONWORKS.—The new blast-furnace at these works is now completed, and in full operation. It has been erected from designs furnished by Mr. S. H. Blackwell, of Russell Hall Works, Dudley, and is on a new principle, and on a very much larger scale than any of the furnaces ever worked before in the anthracite district. If this furnace answers we may expect the erection of several more of the same kind, as well as rolling-mills and forges on a large scale. Several enterprising capitalists have embarked in the speculation, and take the deepest interest in its success. It is, as yet, too soon to form any opinion in the matter, but up to the present time everything has gone on highly satisfactory. The yield is good, and the iron of a very superior quality. We hope, for the sake of the neighbourhood at large, as well as those who have embarked their capital in the undertaking, that every success will attend the efforts now being made under the very able, active, and energetic superintendence of Mr. Blackwell. —Cambrian.

HOLLOWAY'S PILLS FOR BILIOUSNESS.—How often does it happen in families that the least robust are the most precious; in such cases how much misery would be spared if these purifying, invigorating, and laxative pills were judiciously administered. Holloway's admirable pills have worked their way by their intrinsic merits, and, in spite of interested opposition, have established their supremacy as a household remedy, equally well adapted for the derangement of the system and the infirmities of the elderly. These corrective pills carefully remove the seeds of disease, and prevent the injurious results arising from luxuriant indulgence, irregular hours, or similar causes. To the weak this medicine is a precious boon, as it re-endows them with full health and strength.

REDOL-ATR.—Nov. 17: In the 70 end, driving north-east on the Brynla vein, we have five or six separate branches, producing a good quantity of lead ore. The end will pay for working at its present value; the ground is a little stiffer than when last reported, but I have never seen the end looking more promising than now. In the winze sinking below the 70 the ground remains unaltered; we have some good stones of lead from here occasionally. The cabin is now completed for the men to change in. We are getting on with the dressing as fast as possible for the sale on Dec. 8.

BILLINGS.—F. Evans, Nov. 17: As stated in my last report, the late rains filled the old workings west of the engine-shaft, and the shaftmen are driving in the roof of the 70 to let this water down; this will we hope soon be accomplished. This driving is worth 15 cwt. per fathom for lead in solid lumps, and as soon as this piece of ground is holed to old workings the engine-shaft will be resumed sinking below the 70. The stopes produce a good deal of coarse lead stuff, and at times rich ore.

BOSCAWEN.—J. Edwards, R. Giles, Nov. 12: The lode in the 86, driving west of Hunter's shaft, is 1 ft. wide, unproductive. No lode yet intersected in the 80 cross-cut south. The lode in the pump-wins sinking below the 70 is 3 ft. wide, worth 20 ft. per fathom for copper ore. We have suspended No. 1 winze in bottom of the 70 in consequence of water, and shall resume sinking No. 2 winze in the coming week. The south lode in the 70, driving east of Hunter's shaft, is 1 ft. wide, producing stones of copper ore, but not to value. We have suspended driving the 70 west for the present. The stop in back of the 70, west of Hunter's shaft, is worth 15 ft. per fathom for copper ore. The lode in the 40, driving west of Hunter's shaft, is 2 ft. wide, worth from 10 ft. to 12 ft. per fathom. The lode in the 14, driving east of Kiteley's shaft, is 1 ft. wide, producing a little tin, but not to value. No change to notice in the 74 ft. level, west of said shaft.

BOTTLE HILL.—J. Eddy, Nov. 17: Main Lode: Since our meeting, on Aug. 10, we have not resumed working in or near Will's shaft, in consequence of the continuance of dry weather. The same cause stopped our workings near William's shaft, as well as driving eastward on Robert's lode. At about the junction of the main and Bocking-house lode we sunk the shaft 20 ft.; east of this is a stop working by six men; the lode is from 9 ft. to 12 ft. wide, worth for tin ore about 7 ft. per solid fathom, working at 17 ft. 10 in. West of this shaft we have eight men stopping and driving; the lode is about 7 ft. wide, worth 10 ft. per solid fathom; working at 35 ft. per fathom. Here we have a great quantity of whole ground. Two men are stopping the back of adit level. West of this shaft the lode is about 8 ft. wide, worth 4 ft. per fathom. Four men are stopping and driving the back of the 12 under the adit, east of shaft; the lode is about 9 ft. wide, worth about 6 ft. per fathom; working at 35 ft. per fathom. From the bottom of this shaft we are driving a cross-cut to Blanchard's lode, by four men, at 2 ft. per fathom; it is now in about 6 fms., and I expect to cut the lode in about 4 fms. further driving—say, in about three weeks. South Lode: We found the ground very hard in the cross-cut to the No. 2 lode, and have suspended the driving for the present. I hope to resume this driving after another sampling. The long continuance of dry weather has kept back our sampling, but now we have a good supply of water. We sold a fortnight since 3 tons 14 cwt. 1 q. 16 lbs. of tin for 214 ft. 12 s., and I expect to sell in about three weeks 4 tons. We have a great quantity of tinstuff underground, and no time shall be lost in sending it to market.

BYNTAIL.—J. Roach, Nov. 17: During the last three days we have been driving in the ground on the south part of lode, and timbering the same, consequently but little of the ore-bearing portion of it has been seen since my last; we have a piece down, which we shall soon cut down, and in my next I will report on its character and value; from present appearance I expect it will be good. The 30 cross-cut, which is fast approaching the ore-bearing ground passed through in the level above; when this is driven under I expect we shall meet with a good course of ore. Nothing new in the 20 since last reported. The machinery is in good working order, and good progress is being made in laying open the different levels, where we daily look forward to important improvements.

BULLER AND BASSET UNITED.—J. Rule, Nov. 16: The 80 west, on the south lode, is looking more cheering, and is producing ore of a rich quality, but not enough as yet to value. The ground in the cross-cut north is favourable for driving. In the 60 west, South Lode: We found the ground very hard in the cross-cut to the No. 2 lode, and have suspended the driving for the present. I hope to resume this driving after another sampling. The long continuance of dry weather has kept back our sampling, but now we have a good supply of water. We sold a fortnight since 3 tons 14 cwt. 1 q. 16 lbs. of tin for 214 ft. 12 s., and I expect to sell in about three weeks 4 tons. We have a great quantity of tinstuff underground, and no time shall be lost in sending it to market.

CAPE CORNWALL.—R. F. Goldworthy, Nov. 16: Saturday last was our pay and setting-day, which went off well. We set the adit to drive south on Wheel Owl lode, by two men, at 55 ft. per fathom; the lode continues to produce good stones of tin. The shafts to sink from the surface, on Wheel Owl, by four men, at 3 ft. the lode is of a very promising character. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the skip-rod. We have dropped to the 50, and have forked the water to within 3 fms. of that point; from reports received from old miners we shall find tribute ground at the 50. The 40 is extended 16 fms. east and 17 fms. west of the shaft; the lode is 3 ft. wide, producing a little tin. Our sumpmen are engaged in dropping, and putting in the

for lead and jack from 601. to 701. per fm. The dump in the 155 has, during the month, been holed to the stopes in roof of the 165; and, after having worked down the ends, the stopes will be led off from each end of the dump. This communication has opened out to us an immense piece of ground on a wide level, rich for jack and lead. We have also cleared away in the last-named level (the 165) a sufficient quantity of stuff to enable us this month to resume the driving northwards. The end when stopped was in a "nip," but in the short time of its having been resumed the level has begun to open out and improve. The 180 and 190 ends continue to lay open valuable ground, and are worth as much as last reported—601. to 701. per fm. The value of the 200 is just now unknown, in consequence of its being driven on the side of the level; and the 210, north of the Welsh shaft, is not yet up to the productive ground; but, as the two parts of the level are now drawing together, we expect very shortly a change for the better. The Welsh and engine-shafts will be resumed sinking as speedily as possible, in both of which there is a rich lead standing for jack.—South Ground: We are yet without improvement in the 190, driving towards the copper ground. In the 165 the level is large, from 7 to 8 feet wide, and rich for copper and jack—for copper alone, about 401. per fm. The 155 end for lead is not so rich as last reported by Captain Killo, but the level is still large—6 ft. wide, and will produce 12 tons of good copper ore per fathom. The copper ground above this level is without change, and stopes in the 60 continue equally productive for jack and lead.—Dumbell's: The level in the sump, sinking below the 70, is 4 ft. wide, worth for jack and lead 601. per fm.; and the 70 end—now 7 fathoms north of the sump, where in all the ground above the level was "nipped" and worthless—still opens out a wide and productive level, worth 501. per fm.—Agnelish shaft is completed down to the first level 15 fms., and we expect the next sinking will go on without the aid of pumps, as the water appears to be drained by the 110 fm. level—an important circumstance, which will make the sinking more rapid and easy. As soon as possible operations in the day level will be resumed.

GREAT NORTH DOWNS.—J. W. Crass, W. Jenkin, Nov. 16: We have resumed sinking Vivian's engine-shaft below the 67 fm. level, by twelve men, at 41. 5s. per fm. To-day the level in the bottom of the same shaft more promising than usual, and produces good stones of copper ore. The level in the 67 fm. level, driving east of said shaft, is 4 ft. wide, producing stones of copper ore. The level in this level, driving west of shaft, is 6 ft. wide, promising in appearance, and kindly for improvement, at present spotted with copper ore. The level in the 67 fm. level, driving west of engine-shaft, is worth 81. per fathom. The level in No. 2 winze, sinking below the said level, is worth 81. per fathom. The level in the stopes in the back of this level, west of engine-shaft, is worth 91. per fathom. Jenkin's shaft, sinking below the 67 fm. level, is suspended on account of water. The level in the winze, sinking below the 67 fm. level, east of the latter shaft, is worth 91. per fathom. Penndar's level, in the 67 fm. level, driving east and west of cross-cut, is at present unproductive. The level in the 75 fm. level, driving west of King's shaft, is worth 51. per fathom, and promises an improvement. We have set the back of this level, west of said shaft, to stop on at 4s. in 11., where the men can get fair wages. The level in the winze, sinking below the 67 fm. level, west of King's shaft, is unproductive. The 70 fm. level, driving east of Siegan's shaft, is yielding saving work for copper ore; the part of the level that is being carried in this level, driving west of shaft, is 4 ft. wide, exceedingly promising in character, and worth 161. per fathom. The tribute pitches throughout the mine are producing about the usual quantity of ore.

GREAT RETALLACK.—W. H. Reynolds, Nov. 17: The ground in the adit end is now improved, and the men are making better progress in driving. I have put some men to open on the level last intersected in order to ascertain its bearing and general character; it is yielding some good stones of lead, and some good work for blende.

GREAT SOUTH CHIVERTON.—J. Nancarrow, Nov. 16: We are making the usual progress in driving the west end southward, from which the water flows as freely as ever; this end has recently passed through a large blue flooken, containing a great deal of the muddle, which runs east and west, and underlies south; this is likely to favourably affect the level, and produce lead in deeper levels. The kilias in the east end is getting more blue as it approaches the level, which is a most favourable indication. The masons are making progress in building the second house and store-room.

GREAT SOUTH TOLGUS.—John Daw, Nov. 16: Friday last was setting-day. In the 166 fm. level, west of Lyle's shaft, the level is 3 ft. wide, producing low quality tin-stuff; set to three men and three boys, at 41. per fathom. In the 154, west of Lyle's shaft, the level is 4 ft. wide, worth 101. per fathom for tin; set to four men, at 41. 10s. per fathom. In the 154, west of cross-cut, the level is 1 ft. wide, producing 1 ton of copper ore per fathom; set to six men, at 41. 10s. per fathom. In the 154, east of cross-cut, the level is 1 ft. wide, unproductive; set to four men, at 31. 10s. per fathom. In the 140 fm. level cross-cut south we have intersected the tin lode, but have not cut through it as yet; the stuff that has been broken from it has produced a little tin; we have commenced to drive east on it by four men, at 71. per fathom. In the 130, west of new shaft, the level is 1 1/2 ft. wide, worth 51. per fathom for copper ore; set to four men, at 31. 3s. per fathom. In the 125, west of Lyle's shaft, the level is small and unproductive; set to four men, at 41. 10s. per fathom. In the winze sinking below the 125 the level is split into two parts, and these are producing stones of copper ore; set to six men, at 41. 10s. per fathom. In the 100, east of Noel's shaft, the level is 1 ft. wide, worth 51. per fathom for copper ore; set to four men, at 31. 10s. per fathom.

GREAT WHEEL BADDERN.—J. Jenkin, Nov. 12: Hill Brothers Shaft: The cross-cut driving north at the 75 is now in 14 fms. from shaft; ground containing large deposits of spar, and the kilias, and still continues to produce water flowing rapidly from the end. In the tin stones east of Buckley's, in the 25, the level is about 4 1/2 feet wide, producing fair quality tin-stuff. Surface and other operations throughout the mine are being carried on with all speed.

GREAT WHEEL BUSY.—John Edwards, J. Petherick, J. Tredinnick, C. Bawden, Nov. 12: The level in the 110, driving west from No. 2 cross-cut, is 18 in. wide, worth from 101. to 121. per fm. for tin. The level in the 140, driving east from No. 1 cross-cut, is 4 ft. wide, worth about 251. per fm. for tin, and a little copper ore. The level in the 140, driving west from Offord's shaft, is 4 1/2 ft. wide, worth 301. per fm. for tin and copper ore; the level in this level, driving east from said shaft, is 6 ft. wide, worth 351. per fathom for tin and copper ore. The level in the winze sinking below the 130, east of Offord's shaft, is 3 1/2 ft. wide, worth 151. per fathom. The level in No. 1 winze sinking below the 130, east of Offord's shaft, is 6 ft. wide, worth 251. per fm. The level in the 130, driving east of said shaft, is 3 ft. wide, worth about 151. per fm. for tin and copper ore. The level in the 130, driving west of Fielding's shaft, is 2 1/2 ft. wide, producing good stones of tin, but not to value. The level in Mathew's shaft, sinking below the 110, is 3 ft. wide, producing a little tin, but not to value. The level in the 110, driving east of said shaft, is 2 1/2 ft. wide, producing a little tin, but not to value. The same remark applies to the 100. The level in the 80, driving east of Mathew's shaft, is 6 feet wide, worth 21. per fm. for tin. The level in the 80, driving east of said shaft, is large, but unproductive. The level in the 70, driving east of the above shaft, is large, and at present poor. The stopes in the back of this level is worth about 101. per fm. for tin and copper ore. The level in Walker's shaft, sinking below the 80, is 2 1/2 ft. wide, producing good stones of tin. The 30 fm. level cross-cut is extended south from said shaft towards Wheel Vor lode 7 fms 4 ft. 6 in.

GREAT WHEEL METAL.—Wm. Chappell, Nov. 14: This morning I have put nine men to cut down shaft, so as to sink as quickly as possible before the wet weather sets in. They have to cut down about 6 ft. of it, when they will be able to sink on the course of the level, which I value at 151. per fm. I have put two men to clean up the level shaft, so as to see all that I can before the winter sets in. It must be pleasing to all to clear up two shafts, and discover such a good lode for tin in so short a time.

GREAT WHEEL VOR UNITED.—T. Gill, F. Francis, S. Harris, Nov. 15: Ivey's shaft is sunk about 11 fms. below the 137; the level in the bottom of the shaft is worth about 401. per fathom for the length of the shaft. We have commenced to-day to drive east of the shaft, to communicate with the 162 driven west from Metal shaft. In the 167, driving east of Ivey's shaft, the level is still disordered from the influences of the slide, but the end is yielding some splendid stones of tin. In the 157, driving west of Ivey's shaft, the level is about 1 1/2 ft. wide, worth 201. per fm. In the rise in back of the 157, west of Ivey's shaft, the level is 3 ft. wide, worth 251. per fm. In the winze sinking below the 147, east of Ivey's shaft, the level is 4 ft. wide, worth 1501. per fm. In the 184, driving east of Metal shaft, the level is 2 ft. wide, worth 201. per fm. In the 184, driving west of Metal shaft, the level is about 2 ft. wide, worth 601. per fm. In the 174, driving east of Metal shaft, the level is 3 ft. wide, worth 651. per fm. In the 174, driving west of Metal shaft, the level is 3 ft. wide, worth 801. per fathom. In the 162, driving west of Metal shaft, the level is 3 ft. wide, worth 2001. per fm. In the rise in back of the 162, west of Metal shaft, the level is 3 ft. wide, worth 2001. per fm. In the winze sinking below the 174, east of Metal shaft, the level is 4 ft. wide, worth 501. per fathom. We are now making progress in sinking Edward's shaft below the 80. The lode intersected in the 80 is 4 ft. wide, but poor for mineral; it shows very good indications for an improvement shortly. Our new steam-whim is working very well. All our machinery throughout the mine is in very good repair, and working well. [Since the receipt of our agents' report, we have this morning received a communication from the mines informing us of an accident to the plat-form of the 85-inch engine.]

GRYLLS WHEEL FLORENCE.—Edw. Rogers, E. Rogers, Nov. 15: In our underground department there is no alteration during the past week. At surface, the shears, capstan, balance-bob, &c., are fixed; the launders, stands, and flat-rods nearly completed, and hanging-rod connected from the balance-bob to the deep adit. To-morrow we expect to commence fixing the plunger.

HARWOOD.—J. Race, Nov. 11: They have got a hopper put in No. 5 rise, and are now taking up the stopes in the cross-cut; after this is done I will put them to drive the level again. The end of the drift east in the vein is looking well, still worth 1 ton of ore per fathom. The stopes are worth 8 cwt. of ore per fm.; they are not yielding so well as I expected. No alteration in Trough Low level.

HAVAN.—Geo. Jones, Nov. 15: There is no change to notice in Carrington shaft since last reported. By stripping down the branch of ore which stood on the south side of the 10 east, we may reasonably expect to produce tin former results. About 15 fms. behind the present end, so I am glad to say that the lode in this end has again improved, worth at present from 1 to 1 1/2 ton of lead ore per fm. The stopes in back of ditto still continue to yield about 1 1/2 ton of lead ore per fm. The stopes in back of the 10 west will produce about 1 ton of lead ore per fm. We have not yet seen any ore in the deep adit during last week, but the lode looks very kindly for producing minerals. The ground is not quite so favourable for progress as heretofore. We are shipping to-day 60 tons 1 cwt. of ore to Sims, Williams, Neville, and Co., Llanilly.

HAWKMOOR.—J. Richards, West Hawkmoor, Nov. 15: We have cut about 6 ft. on the course of the first lode intersected in the cross-cut north; it is about 6 in. wide, composed of quartz, capel, and beautiful spots of yellow copper ore of good quality. We have now resumed the cross-cut north to intersect the other lodes in that direction. The ground in the cross-cut is easy for driving, costing us 31. 10s. per fm. The lode in back of the adit level is producing some very good work for tin ore.—East Shaft: The level in the stopes in the 25 is worth 2 tons of good quality copper ore per fathom.

HINGTON DOWN CONSOLS.—T. Richards, Nov. 16: The 120, east of Bailey's engine-shaft, has improved, present value 3-4. per fathom. The 120, west of Bailey's, is worth 401. per fm. The 110 west is worth 401. per fm.

KELLY BRAY.—J. Rowe, Nov. 16: The level in the winze sinking below the 25 is looking well, worth 301. per fm. The level in the stopes east from winze is worth 301. per fm. The level in the stopes west from said winze is worth 251. per fm. In the 60 cross-cut north we have met with some hard floors of capel, which are apparently coming from the lode. There is no change in any other point of operation since last reported on. We calculate to sample at the usual time (Friday week next) about 100 tons of copper ore.

LADY BERTHA.—Capit. Harper and Metherell, Nov. 14: We have no change to inform you in either of the bottom levels since last report. In the 30, east of cross-cut, we are still driving south through ground of a very congenial character, carrying muddle and spots of copper ore, letting down a little water. The tribute pitches continue to produce much as usual.

LEAWOOD.—Richard Andrew, Nov. 16: The water is forked about 16 fathoms. The engine and pitwork is working very well.

LAINIVET.—J. Tregay, Nov. 12: Oulton's Shaft: The south lode, in the 10 east and west ends, is producing good stones of tin. The 10 east, on Vance's lode, is producing a little tin. The 10 west, on Vance's lode, is producing good stones of tin. The shaftmen are making good progress in sinking Petrie's engine-shaft. The level in bottom of the account-house shaft is very large, and is yielding saving work for tin.

MAIDLIN.—J. Tregay, Nov. 12: Old Mine: In the 70 east we have got a very strong gossan lode, intersected with muddle, quartz, and spots of copper ore. At Combe no lode is yet intersected.

MINERA UNION.—W. T. Harris, Nov. 17: Brabner's Shaft: The lode in the 80 yard level is not so productive as last report, but is very promising for an improvement;

the rise in back of this level yields occasional stones of lead. The pitch, north of No. 1 winze, is worth 3 tons of lead per fathom; the pitch, south of No. 2 winze, is worth 15 cwt. of lead per fathom. The winze in bottom of the 60 yard level produces good lead, with every prospect of a continuance.—Williams's Shaft: The pitch in bottom of the 40 yard level is worth 5 cwt. of lead per fathom; the pitch in back of the same level is worth 8 cwt. of lead per fathom.

MOLLAND.—Thomas Bennett, Nov. 16: During the past week the shaftmen have been engaged in cutting ground for penthouses, which, I expect, will be in to-morrow, when they will commence sinking the engine-shaft below the 62. The stopes in back of the 42 east are producing 1 1/2 ton of low quality ore per fm. The stopes in back of the 32 east, on the north part of the lode, are producing 1 1/2 ton of ore per fathom, of moderate quality. I met the sampler at Barroscup on Monday, and sampled our ore, which will be sold on Thursday week. According to the sample of our ore which I assayed yesterday it will make 5 1/2% produce.

NANGLEES.—J. Rowe, Nov. 15: The lode at the engine-shaft is 3 1/2 ft. wide, producing stones of ore, and looking favourable for improvement: we have not seen the south part at the shaft yet. The 107 west is looking much more promising than it has for some fathoms driving; the level is 5 ft. wide, composed of quartz, mixed with ore. The level in the 107 east is 2 1/2 ft. wide, containing muddle, with a little ore. The winze sinking below the 96 has improved; the level is worth 301. per fm. We find that the lode in which the ore is making is standing to the north of the level driven west, and communicated with Broad and Cheese winzes. The 96, east of the shaft, is driven on the north part of the lode, which is poor. We have put the men to cross-cut south to see the south part of the lode, on which we have a good improvement. In a tribute pitch working above the level, 5 fms. east of the engine-shaft, finding the lode diverging from the north part, going east, and being a good lode, working at 8s. tribute, and the men getting very good wages, we look at this improvement to be of great importance to us, seeing that the ground east is wholly unexplored. The stopes below the 96, east of the shaft, are worth 151. per fm. The stopes in Broad and Cheese winzes are worth 151. per fathom. The tin lode in the 56 is worth 151. per fm.

NANTES.—R. Williams, Nov. 16: We have driven the adit east, on the north lode, 10 fms.; the ground is good, and the lode produces stones of ore, but so far is not of value, while the indications of improvement are present. The object in driving this level is to prove the tin and the south lode, which stands 10 or 12 fms. to the south of us; we think it better to get into the hill a few fathoms farther, which we can do at little expense, and then cross-cut to the south lode from that point, which will give this part of the property, in my opinion, a fair trial.

NETHER HEARTH.—W. Vipond, Nov. 12: The beds continue to rise slowly in the cross vein level. The limestone is now above the level, and the vein does not appear so large in the haul, but I think the veins are going on together. There is a little change in the drift from old shaft, but I cannot say what it may be.

NEW BIRCH TOR AND VITIFER CONSOLS.—W. Skewis, H. Trevarthen, J. Symons, Nov. 15: Humberley's Shaft: The main lode, in the 45 west, is worth 31. per fathom. The 36 is yielding good stamping work for tin. In the 12 there is a large and kindly lode, producing a little tin. The cross-cut going south at this level has not yet intersected either of the branches. The north lode, in the 45 east, is 5 inches wide, producing a little tin. The 36 is worth 121. per fathom; the winze sinking under this level is yielding good stones of tin. In the 24 the lode is poor at present. In the 12 east the two branches have come together in the bottom of the end, and worth 61. per fathom; the lode in the winze sinking under this level is worth 61. per fm.—Cence's Shaft: The ground has improved for sinking. The lode has not been taken down to the bottom.

NEW CHIVERTON.—J. Juleff, J. Trowatha, Nov. 11: The south lode is cut through at the 50, north of the engine-shaft, which is now 2 ft. wide, composed of soft spar, flooken, and muddle, with stones of lead; we consider the lode at this point very much improved in character, and of far greater promise than where seen at the 30, and we believe that it will quickly improve in driving east of the shaft. We propose continuing the 50 fm. level cross-cut north to intersect the north lode; this we think can be done in six or seven weeks from this time. In the 30, driving east on the south lode, the level is 18 in. wide, composed of spar, blende, and tin. In the 20, east of the shaft, we have put the men to drive a cross-cut south to intersect the south lode, and as well we think there is a part of the north lode standing between the two lodes, which this cross-cut will prove. Two stopes in back of the 20, east of winze, are worth 81. per fathom each on the north lode. The stopes in bottom of the 10, east of winze, is worth 71. per fm.—Setting Report: The 50 cross-cut, north of engine-shaft, is set to four men, at 31. per fm. The 50, east of engine-shaft, is set to four men, at 31. per fathom. The 30 east, on the south lode, is set to four men, at 31. 10s. per fm. The 20 east, to cross-cut south of north lode, to four men, at 31. per fm. No. 1 stopes in back of the 20 is set to four men, at 35s. per fathom; and No. 2 stopes, 35s. per fathom. The stopes in bottom of the 10 is set to six men, at 40s. per fathom. Against the net setting we hope to have fit for the market about 40 tons of blende, and about 5 tons of lead.

NEW CONCORD SILVER-LEAD AND COPPER.—J. Snell, Nov. 15: The 12 fm. level has been suspended ever since I last reported. We have cut through the lode at the 20 at the eastern point of its drive, and find it to be altogether nearly 2 fathoms wide, but its leader part about 3 ft. wide, composed chiefly of quartz, flooken, muddle, and jack, not altogether without lead, but comparatively poor. We have dropped all our lifts, and the mine is in fork to the bottom, but cannot get to see the lode at the bottom lode, in consequence of a heap of stuff, timber, &c., being lodged at the bottom of the shaft; however, the level is now clear, and the lode is 2 ft. wide, and, in order to see the different ends, and also whether we can discover any ground that will do to work for ore. The 28 is sufficiently clear so as to go about 30 fms. east and 12 fms. west of the engine-shaft; how far these levels are extended east and west from shaft we cannot yet find out. The lode in the back of the 28, as far as can be seen, has been nearly all taken away for ore from the arches of ground discovered; in exploring this level we have broken a little ore, but have now let it on tribute at 16s. in 11. The ground in bottom of this level seems to be nearly whole, but we cannot say anything particular respecting its quality, it being covered with mud, &c. The 28 is completely filled with stuff, so we cannot yet see the lode at this level; however, we have a drawing-machine erected, and is now at work, by means of which, and good success, I hope soon to have all the levels clear.

NEW PEMBROKE.—Francis Pucker, John Pucker, Nov. 14: Saturday last being our monthly setting-day, we set the following tribute bargains:—The 60 cross-cut to drive north of the engine-shaft, by six men, at 51. 10s. per fathom. The 60 cross-cut to drive south from the same shaft, by four men, at 51. per fathom. The 45 end to drive east of the engine-shaft, on the north lode, by four men, at 41. per fathom; the lode in this end is 4 feet wide, still of a very kindly character, producing a little tin, and letting out a large stream of water. We have commenced stopping the back of the same level, 2 feet wide, producing stones of tin. The lode in the winze sinking below the 47, west of said shaft, is 3 ft. wide, worth 251. per fathom; the lode is 2 feet wide, and, producing saving work for tin. In the 30 east the lode has made a splice, and is now small and poor. We have suspended this end for the time, and put the men to sink a winze below the same level, to ventilate the 45 fathom level, and also to prove down the lode; cost for sinking, 31. per fathom.

NEW ROSEWARNE.—E. George, W. Mitchell, Nov. 16: We have not taken down any lode at Bickford's shaft since our last report; worth 151. per fm. The lode in the 74, west of Bickford's, is 7 feet wide, producing good stones of tin and copper. The stopes in back of the 74 west is worth 251. per fm. The level in the 67, west of Bickford's, is 2 ft. wide, producing stones of tin. The level in the winze sinking below the 67, west of Bickford's, is 1 1/2 ft. wide, worth 51. per fm.; the stopes in the back of this level is worth 101. per fm. The level in the 58, west of Bickford's, is 3 feet wide; at present poor. The two stopes in the back of this level are each worth 201. per fm. The lode in the 46 west is small and unproductive. There is no change in the 34 since our last report. We sold on Friday last 102 tons of tin-stuff, which realised 6941. 3s. 3d.

NEW TRELEIGH.—R. Mitchell, Nov. 17: The level in the 90, west of C.R.'s engine-shaft, is worth 81. per fathom. No lode taken down in the end or the stopes at the 80, west of the same shaft, for the week. The level in the winze sinking below the 70 is improving. Our progress at the 60 east level has been rather slow, in consequence of a deficiency of air. The level in the new shaft is increasing as it goes down, now fully 3 ft. wide. These levels must be all overhauled, and the ore taken out; the lode contains a large quantity of muddle, which we deem a good indication, as we generally find similar occurrences over deposits of ore. We intend sampling next Tuesday; the quantity will be from 85 to 90 tons.

NEW WHEEL MARTHA.—H. Rickard, G. Rickard, Nov. 17: The level in the 86 west is of the most promising description, yielding copper ore to the value of 101. per fathom, with an improving appearance; the water is lasing very strong, which makes our progress rather slow. The 74, on the north part of the lode, is at present unproductive; at this point we intend to cross-cut through the lode to ascertain its size and value. The 64 west is worth from 121. to 151. per fathom, and likely to further improve. The stopes in the bottom of the 52, west from No. 1 winze, is worth from 251. to 301. per fathom. In the 40 west we have branches of sulphuric muddle crossing the lode, which indicates the cross-course near at hand; this is also a good feature, as we have found the most productive parts traversed by similar veins—the lode is now worth from 121. to 151. per fathom. The south part of the lode in the 20 west is at present unproductive, but judging from the appearance of the lode as seen in the level above, we may reasonably expect it to produce tin former results. About 15 fms. behind the present end, we have a cross-cut to the north part of the lode, which was divided by a horse of kilias 3 fathoms wide, and as far as the lode is seen is worth 101. per fathom, and when opened up will greatly add to our returns. The level in the winze sinking below this level is still a good course of ore, worth 301. per fathom for length of winze (9 feet), now down about 9 fathoms towards the 40. The whole of the tribute department is looking well, and at no former period did the mine present more encouraging appearances than at present. All the machinery is working well.

NEW WHEEL ROSE.—J. Middleton, Jas. Hamill, Jun., Nov. 17: Since our last report we have been doing great work, and have discovered a very kindly branch, of which we hope to speak more fully next week.

NORTH BULLER.—R. Fryer, H. Harvey, Nov. 12: The level in the 100, east of engine-shaft, is 3 ft. wide, composed of muddle, peach, spar, and a little copper ore; ground a little more favourable for driving. The ground in the cross-cut south of this level is without change since last reported on, but the end is letting out a little more water. The level in the winze sinking below the 78 is 1 ft. wide, producing rich stones of copper ore. The level in the 80, west of cross-cut, on King's north lode, is 18 in. wide, composed of prlan and spar, with good stones of copper ore. In the 70, west of King's flat-rod shaft, the lode is 2 ft. wide, composed principally of muddle, with some rich copper ore intermingled—King's lode.

NORTH CHIVERTON.—J. Hampton, Nov. 16: We have met with a branch of lead in the new engine-shaft, which is embedded in a soft light blue kilias, and a better channel of ground for lead was never seen in any mine. At the 20, below adit, in the little engine-shaft, we have cut Shepherd's lode, but not yet through; it is letting out water freely, but nothing of importance can be said about it for a day or two, although we can see it contains lead and blende. In the old engine-shaft the sumpmen are getting on satisfactorily, and will soon be down to the 5, below the deep adit. The stopes in back of the deep adit vary in quality from 81. to 101. per fm. for blende, and at the back of the 20 are worth at present 91. per fm. The dressing operations progress favourably for sampling at the end of the month.

NORTH DEVON SILVER-LEAD.—J. Blamey, Nov. 16: The 20 cross-cut is letting out a great deal of water, and we cannot far from the counter lode. The 30 end is producing a good deal of ore, and likely to prove as rich as in the 10, which is still worth 1001. per fm. The other parts of the mine are looking as well as last reported.

NORTH DOWNS.—John Grenfell, Nov. 16: In the 85, east of King's shaft, the character of the ground is very much altered within the last 6 ft., and can now be driven at 71. per fm. Instead of 121., which we have been paying. The lode, too, although still behind the present end, we have a cross-cut to the north part of the lode, which was divided by a horse of kilias 3 fathoms wide, and as far as the lode is seen is worth 101. per fathom, and when opened up will greatly add to our returns. The level in the winze sinking below this level is still a good course of ore, worth 301. per fathom for length of winze (9 feet), now down about 9 fathoms towards the 40. The whole of the tribute department is looking well, and at no former period did the mine present more encouraging appearances than at present. All the machinery is working well.

NORTH MINERA.—Nov. 16: Last Saturday being our setting-day, the 40 west was set to four men, at 71. 10s. for the first fathom. The ground is harder for progress, and producing a better appearance than we have before seen it since we have reached this level. The ground is also very much improved in the 50 cross-cut, both for driving and its general appearance for mineral. We shall drive over 7 fms. in it this month, and should the ground continue as it is now, we may calculate on cutting New Brigan lode in three months from this time. No lode has been taken down in the 50 east on the new lode, in the end or stopes, neither is there any change to notice in any other part of the mine since our report for the meeting.

NORTH SHIFERD.—B. Berens, Nov. 17: The shaftmen are making rapid progress in cutting down Decimus engine-shaft, and preparing to sink in future on the course of the lode; the lode in the shaft at present is 2 1/2 ft. wide, containing flooken, soft spar, and muddle. In the 20 end, driving west of the engine-shaft, a good im-

provement has been met with in this end since my last report; I find the lode is day to be very much improving, and the water issue very powerfully from the past week. The lode is 2 feet wide, producing splendid stones of silver-lead ore, and good saving work for dressing, and if it continues to improve as it has done we may expect a rich and productive lode in this end in a short distance driving. The lode in the 29 fm. level end, east of the engine-shaft, is 1 1/2 ft. wide, and of a more promising character than I ever saw it before, the lode containing muddle and a little lead, and letting out a large stream of water; the country around the lode is as good as on a desired, and I feel confident from the indications seen to-day that the north and south shaft below the surface, and hope before the present month to communicate this shaft to the adit level, after which driving will be resumed with all energy, to cut other known lodes to the east of the present adit end. In conclusion, I must say the mine is looking cheerful and encouraging, and it is the opinion of others, as well as myself, that North Shepherds will open up to be a very productive silver-lead mine when further developed.

NORTH TRESKERBY.—R. Fryer, T. Jenkin, Nov. 17: The lode in Treaskerby's shaft, sinking below the 100, is 2 1/2 feet wide, worth 1 ton of ore per fathom. We have just discovered the elvan course in the south side of the shaft, which we consider a good indication. The lode in the 100 end, east of shaft, is worth 141. per fathom, and the full 12 tons of ore per fathom—a fine-looking lode. All other places without change. Our last sampling of copper ore will amount to full 360 tons.

NORTH WHEEL BASSET.—George Davey, Nov. 16: In the 42 cross-cut, north of Grace's shaft, we have met with a branch from 4 to 6 inches wide, producing some good black and grey copper ore; this, no doubt, is a branch split off from the main lode.—North Lode: In the 32, east of Grace's shaft, the lode is 2 feet wide, worth 81. per fathom for copper ore. In the 20 east no lode has been taken down since last reported.

OLD FOR.—W. B. Colom, W. Metherell, Nov. 16: Since the last week's report the only change we have to report is, we are pleased to say, the communication between the 65 and North's winze from the bottom of the 50 is effected, and the lode continues to maintain its full size and productiveness.

OLD GUNNSILLAKE.—W. G. Gard, Nov. 12: In reply to your enquiry respecting the progress made at these mines since the present prospectors began operations, I have much pleasure in being able to state that all the necessary preliminary work is rapidly progressing to completion, and I believe we shall soon be in a position to show you some thing more palpable and encouraging than even the deservedly flattering reports you have already received from several competent mine agents of this very valuable property. The houses and stables for the large pumping-engine will be finished in about a fortnight from this date. The boiler is on the mine, and the heavy parts of the engine in course of delivery. The pumping and hauling-engine, now erected at Parker's shaft, will go to work in all probability next week, and we shall then immediately begin to open up this magnificent lode, and there can be no doubt of our very soon making returns of rich ore from this point; this lode is full 5 ft. wide, and from the surface to the present depth of the shaft (20 fms.) it is composed of a splendid gossan, impregnated throughout with black oxide and grey sulphide of copper, yielding also a small quantity of tin ore, and here and there specks of green uranite. It was precisely the same indication which led to the great prize from the parallel lodes in this set at the first working. A third steam-engine for crushing and crushing is in hand, and will be erected with as little delay as possible. The shallow adit has been cleared up and secured, and the middle adit is nearly complete. As soon as our engines are completed we shall have ample power at our command to open out the following groups of lodes:—That known as the south lode, which has been worked on to the depth of 100 fms., and from which returns will be made as soon as the water is drained; next, and within a few fathoms of it are the little green and Paul's lodes, on neither of which has anything been done of importance. Then follow the Hingston, the caunter, and Parker's lodes, the three latter in virgin ground. I have sent you a few stones of copper ore we have found in clearing up Michael's engine-shaft, and I am sure you will be of the kind of ore formerly yielded by these mines. I think on seeing the level you will really believe the well-known fact that the Old Gunnsillake Mines yielded by far richer ore than any other mine in Great Britain before or since, and as rich as any foreign mine in the world; and I firmly believe the old mine will repeat itself in the parallel lodes you are about to work.

PEDN-AN-DREA UNITED.—W. Tregay, T. Delbridge, Nov. 12: Sump: The 100 east, on the south part of the lode, that sunk in the shaft, is worth 351. per fm. The 130 west end is yielding a little tin, but poor. The 130, east of cross-cut, on the north branches, is poor, and branches small. The 120 east rise is worth 61. per fm. The 110 east end is worth 151. per fm. The 110 west winze is worth 161. per fathom. The 109 west end is worth 41. per fm. The 109 east rise is worth 51. per fm. The 90 west rise is worth 71. per fm.—Cobbers: The 90 east end is worth 61. per fm. In the 65 east end the lode is yielding fair quality tin-stuff; we have cut into it about 4 ft.; no water. The 68 west end is worth 61. per fm. In the 100 east end the men are making good progress in clearing through the run. We hope to get into the cross-course next week.

PENHALLS.—W. Higgins, J. Nance, Nov. 12: The stopes in back of the 50, north of engine-shaft, still maintains its value; the remaining bargains of this shaft are also much the same as when last reported, nor is there any alteration to speak of in either of the end or stopes on the north lode.

PERRAN WHEEL MARIA.—J. Middleton, J. Evans, Nov. 17: We have cleared away all the debris that had accumulated in the adit level, and are now driving on the course of the lode, which yields good copper ore; from what we have seen we expect to have a very good lode by driving on it.

PRINCE OF WALES.—W. Gifford, Nov. 15: At the 30, east of Watson's shaft, we have driven north 6 feet, and intersected a branch; the same we have cut into a 18 in., but not as

draining copper ore.

YANKEE. Baitell, Nov. 16: On Monday last we holed the adit to the new shaft, which came in 10 fms. below the surface; the shaftmen have taken off 10 fms. of the lift, put in penthouse, fixed the tackle, &c., and are now in order to sink the shaft again to the ground in which is good, and good progress will be made. The 40 east, on north lode, is still worth 3 tons per foot; and the stopes in back of same level from 3 to 4 tons per fm. The stopes on the south lode, three in number, each yielding about 2 tons per fm. The one 2 tons and the others 3 tons per fm. each. The men that work in the 30 east are put to cross-cut lode, to see if the main part of the lode is standing in that direction.

MINING NOTABILLIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

GOLD IN WALES.—The Castell Carn Dochan Gold Mine returned, for the week ending the 15th inst., 2 ozs. 11 dwts. of gold, from 19 cwts. of quartz.

EAST RUSSELL.—Old times are resumed, which has caused a great stir here, owing to some discovery at the 130. The telegraph wires are busy at work, dispatching information to the brokers in town. The report is that a great discovery is near at hand, by the change of ground and other indications. No doubt this discovery will establish East Russell as a good mine, which the shareholders well deserve.

WHEAL UNY is looking very well indeed, and the samplings are expected to be considerably increased. The report is very cheering.

PENDEEN CONSOLS.—The agents are preparing to drive the 154, both north and south; and as the ground is very favourable for mineral they expect that this level will turn out a valuable one, particularly so as the adjoining mines, which paid hundreds of thousands of pounds to their adventurers, found their rich deposits of mineral just at the depth that Pendeen is now at. The rich veins still continue to be worth 70l. per fathom, and as it has been worth this sum for many fathoms it will lay open a rich place of ground when completed to the 142 south. Should tin advance to its old price, Pendeen would be working at a profit; indeed, as it is, the agents believe they can pay the costs; therefore no calls are all probable in this mine. At the meeting held on Nov. 5 no call was made. Several good points are expected to be met with shortly, so that any day we may see Pendeen at their old price again.

NORTH DOWNS.—This mine is improving, as the ground is getting very favourable for mineral. The district North Downs is in one of the best for copper in Cornwall. A good discovery (and this is not at all improbable in such a district) would send the shares up, just as it did Great North Downs, the shares in which were a short time since given away, and soon after went to 6l.

EAST WHEAL VOR.—A good discovery is shortly expected, and looked on as of considerable importance in the district, in driving the 60 cross-cut to cut the rich Smith's lode. The rich Old Wheal Vor lode is looking highly promising in sinking the shaft below the 70 fathom level. There has been a good demand for shares this week at 2l. to 2l. 10s.

We are informed that **WHEAL MARGERY** is improved, and is now fully meeting cost, with good prospects of making profits. And that some points are improved in **PROVIDENCE**—in fact, this mine was never in a better position than now, and must be considered one of the most permanent and regular dividend-paying mines in the county.

SOUTH KEMMOTH MINE has been inspected by Mr. Adam Murray, who speaks very highly of the appearance of the 30 and 45 ft. levels. The 45 ft. level north, under the present rich ground, is at present suspended, in order to rise to ventilate, but it bears a still more favourable appearance; the lode is about 18 ft. wide, mostly of decomposed and friable quartz, interspersed with fine-grained lead ore. A discovery more prognosticative of great wealth has not been met with for some time, he believes.

WEST CARADON MINE has considerably improved in several points. The shares, which some time ago were at 90l. to 100l., are now at the absurdly low price of 7l. to 8l., or 8000l. for the mine.

AT NORTH CHIVERTON the Old Shepherds lode has been intersected, and already contains both lead and blende. In a few days more will be seen more of this discovery. The other parts of the mine have improved during the past week. About 400l. worth of blende and lead will be sampled at the end of November.

GREAT EAST LOVELL.—The engine is now nearly all on the mine, and will soon be erected, when active operations will be commenced upon the numerous lodes traversing this shaft, which includes those that are now being operated upon so successfully in East Lovell. After the engine is paid for there will be about 2000l. capital for the purpose of developing the mine. The shares have not yet responded to the great rise that has taken place in East Lovell.

NORTH SHEPHERDS.—An important discovery has been made in the 20 end, driving west of engine-shaft, where the lode is 2 feet wide, producing splendid stones of rich silver-lead ore, and is still improving. A box, containing samples of the rich stones has been received at the company's offices. If this discovery continues to improve like it has for the last few days, the shares will, no doubt, rise to a very high figure in a short time. Other parts of the mine are also improving daily.

EAST WHEAL LOVELL.—This mine appears to be exceeding the most sanguine expectations. A discovery of tin has just been made at the new shaft, where the lode is valued at 20l. per fathom, and is being driven for 20s. per fathom, thus leaving highly profitable ground. This is only 8 fms. from surface, therefore it is as yet in virgin ground. The same lode in the western part of East Lovell has already produced 20,000l. worth of tin. This lode is distinct from the other rich lodes, and is distant from them about 120 fathoms, and in the intermediate ground there are three more lodes yet to be intersected.

SILVER VEIN MINE.—Capt. Charles Thomas (of Dolcoath) has made a special inspection of this mine, his report to the directors being of a very satisfactory character, especially considering the extreme caution and moderation which always pervades his reports. He says that, although no decided improvement in the value of the lode has occurred to the depth already reached, yet the lode in the 50 south has a more promising appearance, and northward, in the 50 and 60, there are no symptoms of the lode declining in strength, and there are favourable indications for deeper working. The mine is now only down to about the level of high water-mark of the river, $\frac{1}{2}$ mile off, and the extensive range of clay-slate in this mine and round about it is not liable to be undermined by any unfavourable rock. The prospects hold out encouragement for vigorous prosecution in the way indicated in the report, which he recommends the company to do forthwith, and to erect a whim-cage for drawing the ore by the water-wheel on the mine, instead of by horses, effecting a saving of about 15l. or 20l. a month.

GOLD AND SILVER IN AMERICA.—Nevada is, *par excellence*, the silver territory, yielding already from fifteen to eighteen millions per annum. The precious metal is cast into the shape of "bricks," worth something over \$1000 each. The increase of gold production is stated at \$40,000,000, being about the amount furnished by the new gold-bearing territories. The total gold product of 1863 was estimated by the Commissioner of the United States General Land Office at \$100,000,000, and ere long, in his judgment, it will be \$200,000,000, with half that amount more in copper, quicksilver, tin, lead, iron, and coal from the same regions. [One silver vein in Nevada yields 2000 cwt. per day.]

OTEA COPPER MINING COMPANY.—Every endeavour is being made to commence operations at the copper mine on the Barrier Island. There is an immense quantity of that valuable metal on the island, requiring only the talismanic wand of labour and capital to turn it to a most profitable account. The prosecution of mining in this province is of great importance. The development of our vast mineral resources would add very greatly to both individual wealth and the aggregate wealth of the community. It would attract a considerable population, which would at once create customers for the agricultural produce of the country, and benefit the farmer. We shall be glad, therefore, to hear of the complete success of the company. We understand that there is also a very valuable seam of lead on the same island, which might also be worked with great advantage, and with a certainty of profit to all concerned. —*New Zealand Herald*, July 26.

CEMENTATION OF IRON.—At the Academy of Sciences, M. Marguerite communicated a paper on the Cementation of Iron. M. Caron having laid down the theory that, in cementation on a large scale iron is always brought into contact with cyanides, which alone possess the power of cementing, M. Marguerite proves, on the contrary, that iron may be converted into steel by pure carbon (that is, by either diamond, carbonised sugar, or plumbago), or else by the pure oxide of carbon.

NEW ALLOY FOR IRON.—At the American Institute, Prof. Fleury read a paper on a new alloy of copper, zinc, and tin to be mixed with iron, recently patented by Mr. Arnold. It was stated that 5 to 10 per cent. of the mixture added to cast-iron increased the tensile strength of the iron several thousand pounds to the square inch, as proved by tests at the West Point Foundry.

RAILWAY PASSENGERS' SIGNAL.—Mr. Edmund Tattersall's plan for giving railway passengers a means of communication with the guard in case of accident has been submitted to the Chairman and directors of the London and South-Western, at the Waterloo station. A carriage on that line had been placed at his disposal for some time past, fitted up with the apparatus, under the superintendence of the engineer of the company, and several trials run with it, and with perfect success. The trials were repeated on Thursday, in presence of the officials, and with results which were gratifying to all present. The invention, which is patented, points out at once to the guard, by day or night, the carriage, and even the compartment, from which the alarm signal is given. Each passenger can use the signal without moving from his seat, and each carriage has its own separate apparatus.

BARON LIEBIG.—The German journals contradict the statement that Baron Liebig is about to settle in London.

WEATHER PREDICTIONS.

SIR.—In my letter of Oct. 29, I stated that there would be some earthquakes in England at the commencement of the present month. On the 6th inst. two distinct earthquakes were felt at Comrie, Scotland. The following statement was forwarded to me by a reader of the Journal:—

"During the past week the village of Comrie and neighbourhood have been visited by several shocks of earthquakes. On Saturday two shocks were distinctly felt, but the most severe occurred on Sunday morning, between 9 and 10 o'clock. The tremor of the earth was slight, but, as usual, the shocks were accompanied by a loud rumbling noise, resembling distant thunder, or the booming of cannon. The shocks apparently came from the south-west and proceeded to the north-east. The shocks have not been so frequent as lately since Oct., 1839, when a severe shock was felt over the whole of Scotland. The weather recently resembled very much the weather of 1839."

The igneous theory men must now give up earthquakes as the result of internal fire in our earth. The system of geology propounded by my old friends, Ennor and Hopkins, is correct, and the igneous theory must fall to the ground, like other absurdities of old, which only have an existence in fertile imaginations—the igneous theory may be properly termed "scientific fiction."

With regard to the weather, there was an error in my last letter in reference to the wind foretold for the 14th inst.; the words *light gales* should have read *local gales*. During the week we have had very great fluctuations in the barometer, the readings have been as low as 28.79 inches, yet, notwithstanding this, we have had very little disturbance in the weather; the fact is, the phenomenon is too strong for very bad weather. This I foretold at the commencement of the month. For the future the weather will continue of a changeable character until the 20th, with local gales; gales or strong winds will occur on the 21st or 22d; and from the 24th to the end of the month unsettled weather, with strong winds.

26, Throgmorton-street, Nov. 16.

GEORGE SHEPHERD, C.E.,
Author of the "Climate of England."

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, Nov. 18, 1864.

COPPER.		S. & S. d.		S. & S. d.	
Best selected, p. ton	92	0	0	95	0
Tough cake, " "	87	0	0	90	0
Wire, " "	87	0	0	90	0
Tube, " "	87	0	0	90	0
Burma Burma, " "	93	0	0	95	0
Copper wire, p. lb.	0	1	0	1	0 1/4
Sheet metal, ditto	0	1	0	1	0
Sheeting & bolts p. ton	95	0	0	—	—
Bottoms, " "	105	0	0	—	—
Old (Exchange), " "	91	0	0	—	—

IRON.		Per Ton.	
Best Welsh, in London	7	15	0
Ditto, to arrive	7	15	0
Stafford, in London	9	7	10
Ditto, ditto	9	7	10
Hoops, ditto	10	0	11
Sheets, single	11	0	12
Fig No. 1, in Wales	4	10	0
Refined metal, ditto	4	0	5
Bars, common, ditto	7	0	7
Do, merch, Tyne or Tees	7	10	0
Ditto, railway, in Wales	7	0	7
Ditto S wed, in London	11	5	11
To arrive	11	10	0
Fig No. 1, in Clyde	2	11	9
Ditto, f.o.b. Tyne or Tees	2	16	0
Ditto, forge, f.o.b. ditto	2	15	0
Railway chairs	5	10	0
" spikes	11	0	12

LEAD.		Per Ton.	
English Pig, ordy. soft	20	5	0
Ditto (WB)	22	6	32
Ditto sheet	21	0	21
Ditto red lead	22	0	—
Ditto white	26	0	28
Ditto patent shot	23	0	23
Spanish	19	10	0

REMARKS.—The aspect of monetary and commercial affairs does not wear quite so bright an appearance as it did last week, and in consequence of the unfavourable movement in the continental exchanges the anticipated further reduction in the Bank rate has been postponed for the present. We trust, however, that this slight check will be only temporary, and that the improvement which has already begun will still continue to advance. We must, however, expect these various interruptions in the progress towards a more flourishing state of commerce, and must not be surprised that the tide of improvement does not yet flow on quite unchecked, as we are at present far from being in a safe condition, which the continental failures in the commercial world continue to show; and as long as the money market remains in a state of stringency we shall be sure to find some houses of doubtful standing succumbing to the present difficulties. Still we have every reason to hope that these difficulties will gradually disappear, and that before the close of the year a much more satisfactory state of things will be manifest. The Metal Market is, in some respects, rather better; the prices of some metals have advanced, and are still looking upward; and although there is yet not much more disposition in buyers to operate; yet as the advices from India continue to bear a more favourable aspect, we may expect the arrival of orders, which will lead to greater activity.

COPPER.—There is rather more demand for this metal, and prices are somewhat firmer, and there is a probability that when the Bank rate is again reduced an advance in prices will be announced.

IRON.—In Staffordshire the iron trade is quieter. During the early part of the colliers' strike orders somewhat accumulated, but they are now closely worked up, and as the orders from the North American States are very trifling several of the leading works are not fully employed. The home demand is fair, and the orders from India are improving, and it is hoped that the greater ease in the money market may lead to orders being given out which have been kept back. On the whole, however, it seems likely that the trade will be quiet until the spring. In Welsh, the reduction in the Bank rate, on the 10th inst., has had a slightly favourable effect on the iron trade, and it is expected that orders will be given out more freely by buyers. The works are well employed, although the American demand is not large; yet it is better than it was a month since, and the shipments to New York average 600 to 700 tons per week. A large quantity of railway iron is being sent to South American ports, and there is a prospect of a brisk demand for rails next year. Swedish iron remains in a similar position to last week. In Scotch pig-iron the market has gradually declined during the week, opening at 51s. 4 1/2 d. to 51s. 6d. cash, and 51s. 10 1/2 d. to 52s. one month, but soon declining to the lower prices, and the following day to 51s. 3d. cash, and 51s. 9d. one month; the succeeding day a fair business was done at still lower prices, warrants changing hands at 51s. 2d. cash, and 51s. 4d. one month. The last advices from Glasgow state the market to continue very flat, in the forenoon business being done at 50s. 7 1/2 d. cash, and 51s. one month. On late 'Change the tone slightly improved, and 50s. 9d. cash was paid, and 51s. 3d. one month, while at close sellers held for 50s. 10 1/2 d. cash, and 51s. 4 1/2 d. one month.

LEAD.—The demand still continues very limited, and prices are without any alteration from last week's quotations.

TIN.—Foreign has not materially altered during the week, and the transactions have not been very extensive; sales of Straits have been effected at 95l. 10s. cash, and 97l. full prompt, but lately rather lower prices have been accepted. Small parcels of Banca have sold at 95l. 10s. cash. In Holland Banca is, however, rather firmer, and there is very little offered, at 59 1/2 fl., some holders even demand 60 fl. The quotations are, however, quite nominal, as no business is done, and buyers being only in the market at 59 fl.

SPELTER.—Although very little business has been done in this metal, yet prices remain firm at last week's quotations.

STEEL remains without improvement.

TIN-PLATES.—Makers are rather short of orders, and some of the works are not in regular employ.—**QUICKSILVER** without alteration.

QUICKSILVER.—In the first nine months of the present year no less than 3,714,174 lbs. of quicksilver were imported into the United Kingdom. This quantity is an increase on the amount received in the same period of 1863 of 2,561,441 lbs., and on that relating to 1862 of 3,282,036 lbs. Heretofore this commodity was imported principally from Spain; but of late considerable quantities have been brought from California. The exports of this article in the nine months ended Sept. 30 last were 2,504,921 lbs., against 1,126,533 lbs. in the corresponding period of 1863, and against 719,028 lbs. in the same time of 1862. The bulk of the shipments is sent to Mexico, Peru, India, and Australia.

GLASGOW, NOV. 17.—The market opened flat, and business was done down to 50s. 6d. cash, but afterwards improved, and 51s. 9d. cash was paid. At the close there were buyers at 50s. 9d. cash; sellers 50s. 10 1/2 d. No. 1, G.M.B., 52s.; No. 3, 51s.

SCOTTISH MATTERS.—The amount for which the Gartneth Ironworks have been purchased by Mr. Hawkesworth is stated to be 2000l. The engine at the works, silent for a number of years, has been set in motion with a view to the manufacture, on an extended scale, of malleable iron, cast-steel, and steel shot and shell. Mr. Hawkesworth is connected with the London Steel Tube and Ordnance Company—a concern started to work a patent obtained by him in connection with the manufacture of improved ordnance. The steel made at Gartneth will all be absorbed for the trade of this company.

MIDDLESBRO', NOV. 17.—Since our last the Iron Market has been quiet, neither buyers nor sellers being anxious. The demand for shipment is not quite so brisk, in consequence of the scarcity of ships. The price may be quoted to-day—warrants, 47s. cash, buyers; sellers, 48d. per ton more. No. 1, 50s. 6d.; No. 3, 47s. 6d.; No. 4, 46s. 6d.—prompt cash.

BIRMINGHAM, NOV. 18.—Rylands' "Iron Trade Circular" reports prices in marked bars as before; but some of the smaller makers are relaxing a little in price to obtain orders, and immediate specification. Pigs quiet, without change. Pigs, common forge, 2l. 17s. 6d. to 3l. 5s.; melting, 3l. 2s. 6d. to 3l. 7s. 6d.; mine forge, 3l. 7s. 6d. to 3l. 15s.; better class, 4l.; hydrates, 4l. 7s. 6d. to 4l. 15s.; hematites, 3l. 10s. to 4l. 5s., according to quality; foundry, 3l. 12s. 6d. to 3l. 15s.; North Staffordshire, best make, 3l. 5s.; Cleveland district, 3l. 4s. to 3l. 12s. 6d., long weight, delivered; Shropshire cold-blast, 4l. 10s. to 5l., delivered into the district; Gartneth, 53s. 6d. to 58s.; Eglinton, 52s. 6d. to 54s., delivered on railway at works. We also quote spiegeleisen 6l. 15s.; puddled steel, 12l. 10s. per ton; cast-

steel blocks (raw), 1l. 6s. per cwt.; cast hammered, 1l. 14s. per cwt., both in Hull, for which we are agents in this district; spiegeleisen ore, 20s., at Rotterdam.—Manufactured iron: Marked bars, 8l. 10s.; hoops, 9l. 10s.; singles, 10l.; doubles, 11l. 10s.; lattens, 13l.; angles, 8l. 10s. to 9l.; gas strips, 8l. 10s. to 8l. 15s.; nail sheets, 7l. 12s. 6d. to 9l.; Welsh bars, 6l. 17s. 6d. to 7l. 10s.; Welsh rails, 7l. 2s. 6d., nett; Welsh puddled bars, 5l. 10s., delivered to stations in this district; North Staffordshire bars, 17l. 15s. to 18l., in Liverpool or Birmingham; puddled steel bars, 12l. 10s.; first-class white and mottled pig steel iron at 6l. per ton.

BOSTON, OCT. 31.—In English Cannel coal there have been further sales at 25s. per ton, cash. In Ficton and Sydney cargo sales at 21s. to 21 1/2 per ton. Anthracite has been in steady retail demand at 21s. to 21 1/2 per ton. There is a steady demand for Scotch pig-iron, with sales of Gartneth and other brands No. 1, at 26s. to 26 1/2 per ton, cash; and the market is firm at these prices. American pig-iron has been selling at 26s. to 26 1/2 per ton, cash. Bar and sheet-iron are quiet, and the sales have been confined to small lots.

NEW YORK, NOV. 2.—Foreign coal still continues scarce, and is in good demand, with sales of 175 tons P. O. gas Cannel on private terms. Domestic is in demand, and prices were tending upward. American pig-iron is active, and is firmer. Sales of 250,000 lbs., at 48c., for Portage Lake and Baltimore, 49c. for Detroit, and 50c. for Minnesota. New sheathing and Yellow Metal are steady. Scotch and American pig-iron are held above the views of buyers, consequently the business is light.

PHILADELPHIA, NOV. 4.—The iron trade here has been rather more active this week, owing in some measure to the upward movement in gold, which has imparted a little more life to the market, but the demand is limited, and the difference in the views of buyers and sellers has had a tendency to check business. Sales of about 2000 tons anthracite pig metal are reported, in lots, within the range of 85 to 90 per ton, cash, for the three numbers, including 800 tons, mostly low grade force, on terms kept private, and 700 tons good No. 1, which is most in request, at 86c. Some makers ask more for the latter description, and the market closes quiet but firm. Blooms and bar-iron are also held with more firmness, and the sales moderate. At Pittsburgh there is but little change to report. The demand for iron continues very light, and is confined to small lots as mixture to stock on hands. Some sales have been made at a decline of 2s. to 3s. per ton on the rates paid early last week. For leading canal smelted force iron, 65s. to 66s. per ton may be quoted as the rate. In anthracite we have no sales, but 85 to 90 per ton has been quoted as the asking range for red-short force. In Hanging Rock charcoal the range of price is 75s. to 80s. Lots of fair Foundry Hanging Rock are offered at 75s. per ton on the city landing. Copper is more active, and the sales of ingots large in the neighbouring markets at a slight advance, prices ranging at 47 to 50c. per lb. Sheathing is rather lower, and yellow metal steady, with about the usual business to note in sheets and bolts. Orders for coal come in slowly, and business is dull for the season, with a very moderate demand both for shipment and home use, at quotations which are barely maintained, the shipments being mostly to supply the Government militia.—*United States Railroad and Mining Register.*

THE TIN TRADE.—We are favoured by Mr. L. Th. Van Houten, of Rotterdam, with the official return by the Dutch Board of Trade of the import and export of tin from Holland during Sept., and the nine months ending Sept.:

	1864.	1863.	1864.	1863.	1864.	1863.
From Java	.....Tons 658	Not given	.....Tons 432	Not given	.....Tons 3458	.....Tons 3111
" England	.....32	given	.....211	given	.....220	.....194
" Other countries	.....	separately	.....5	separately	.....22	.....7
Total tons	.....690	372	.....439	2543	.....3700	.....3302

	1864.	1863.	1864.	1863.	1864.	1863.
To Germany	.....Tons 212	43	.....1438	Not	.....1475	.....1825
" Belgium	.....43	Not	.....390	Not	.....246	.....235
" England	.....236	given	.....867	given	.....649	.....1126
" France	.....105	given	.....163	given	.....72	.....116
" Hamburg	.....41	separately	.....21	separately	.....147	.....224
" America	.....	separately	.....21	separately	.....34	.....329
" Other countries	.....189	.....	.....321	.....	.....368	.....255
Total tons	.....846	477	.....4421	2906	.....3674	.....5110

THE COPPER TRADE.—Mr. J. Pitcairn-Campbell, of Liverpool, reports:—There has been considerably more demand from the smelters for the raw material, which having been freely met by importers, a very large business has resulted, both on the spot and to arrive. The following transactions have taken place:—

Nov. 1—225 tons regius, ex "Braganza,"	.....	20	17	0	per unit
" 2—15 tons bars, ex "Christobal Colon"	.....	82	0	0	per ton
" 2—18 tons bars, ex ditto (nett two months)	.....	81	0	0	"
" 2—10 tons bars, ex "Acapulco," ditto	.....	81	0	0	"
" 2—88 tons bars, ex "Aracazo," ditto	.....	81	0	0	"
" 3—225 tons regius, ex "Braganza,"	.....	0	17	0	per unit
" 4—468 tons regius, at Swansea, ex "Pathfinder,"	.....	0	17	0	"
" 4—526 tons regius, at Swansea, to arrive, per "Hercules,"	.....	0	17	0	"
" 4—120 tons ore, at Swansea, to arrive, per "Vencedora,"	.....	0	17	0	"
" 4—368 tons ore, at Swansea, to arrive, per "Duke of Beaufort,"	.....	0	17	0	"
" 4—83 tons ore, at Swansea, to arrive, per "Marq. of Worcester,"	.....	0	17	0	"
" 4—98 tons regius, at Swansea, to arrive, per ditto	.....	0	17	0	"
" 4—462 tons regius, at Swansea, to arrive, per "Swansea,"	.....	0	17	0	"
" 4—446 tons regius, at Swansea, to arrive, per "W. Leckie,"	.....	0	17	0	"
" 4—81 tons ore, at Swansea, to arrive, per ditto	.....	0	17	0	"
" 4—105 tons ore, at Swansea, to arrive, per "Kent"	.....	0	17	0	"
" 5—600 tons Canadian ore, to arrive	.....	0	17	0	"
" 5—220 tons regius, ex "Prudhoe,"	.....	0	17	0	"
" 5—350 tons regius, to arrive, per "Uncas,"	.....	0	17	0	"
" 7—340 tons ore, to arrive, per "T. S. Stowe,"	.....	0	17	0	"
" 7—240 tons regius, to arrive, per ditto	.....	0	17	0	"
" 7—73 tons bars, on spot, ex "Duch. of Lancaster" (2 months)	.....	81	0	0	per ton
" 7—45 tons bars, on spot, ex "Ocean King," ditto	.....	81	0	0	"
" 7—67 tons bars, on spot, ex "Braganza," ditto	.....	81	0	0	"
" 7—18 tons bars, on spot, ex "Aracazo," ditto	.....	81	0	0	"
" 7—100 tons bars, to arrive, per "Rosemont" (usual conditions)	.....	82	0	0	"
" 7—545 tons regius, to arrive, at Swansea, per "St. Bernard,"	.....	0	17	0	per unit
" 7—70 tons ore, ditto	.....	0	17	0	"
" 7—550 tons ore, to arrive, at Liverpool, per "Tamaya,"	.....	0	17	0	"
" 7—640 tons ore, to arrive, at Liverpool, per "Chanarcillo,"	.....	0	17	0	"
" 8—180 tons regius, by tender, at Swansea, ex "Huasco,"	.....	0	17	1	"
" 8—420 tons ore, ditto ditto ditto	.....	82	0	0	"
" 8—100 tons bars, on spot, ex "Jane Blythe" (usual conditions)	.....	81	0	0	per ton
" 8—20 tons bars, on spot, ex "Dundonald" (nett, two months)	.....	81	0	0	"
" 8—50 tons bars, on spot, ex "Andera," ditto	.....	81	0	0	"
" 8—100 tons bars, to arrive, per "Rosemont" (usual conditions)	.....	82	0	0	"
" 8—545 tons regius, to arrive, ex "Peru,"	.....	0	17	0	per unit
" 8—50 tons bars, to arrive, ex "Rosemont,"	.....	82	0	0	"
" 9—120 tons Barilla, on spot, ex "Mexican,"	.....	0	18	0	per unit
" 9—91 tons bars, to arrive, ex "C. Lambert,"	.....	82	0	0	per ton
" 9—33 tons bars, to arrive, ex "Rosemont,"	.....	82	0	0	"
" 9—50 tons bars, on spot, ex "Caracas,"	.....	82	0	0	"
" 14—182 tons ore, to arrive at Swansea, ex "Caracas,"	.....	0	17	3	per unit
" 14—42 tons regius ditto ditto	.....	0	17	3	"
" 14—336 tons regius, to arrive at Liverpool, ex "Gipsy Queen,"	.....	0	17	0	"
Quotations are 17 per unit for ore and regius, 82, per ton for bars, and 18, per unit for Barilla. Stocks in first and second hands likely to be available, as near as they can possibly be estimated, are as follows:—		Ores.	Regius.	Bars.	Ingot.	
Liverpool	1068	1075	3023	—
Swansea	2470	559	1494	220
Arrivals since my last have been, from the west coast:—						
" Braganza," from Valparaiso and Corral	454	67	—
" Jessie Stowe," from Caldera and Lota	191	—

durrow 31—Crane 28.—Total, 3033 tons.

MINING AGENTS, STOCK AND SHARE DEALERS, &c.
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

Messrs. WATSON and CUELL having agents and correspondents in all the mining districts, and an extensive connection among the largest holders of mining property, have the more confidence in tendering their advice on all matters relating to the state and prospects of mines and mining companies, and are enabled to supply shares in all the best mines at close market prices, free of all charges for commission.

At the Royal Geographical Society, on Monday, the Emperor of Brazil was made an honorary member. He is only the second person who has received this honour for his services and dignities in Great Britain. The honour is well merited; for the Emperor of Brazil, in addition to his varied accomplishments, has within the last few years inaugurated in his dominions extensive explorations of the great fluvial arteries of eastern South America. Thus the valleys of the Amazon, of the Rio Negro, of the Rio de la Plata, and of the Rio de las Amazonas, have been explored by him, and his name is associated with the names of the great explorers of the world. There is not a meeting of the Brazil Geographical and Historical Institute at which His Majesty is not seen, by the side of the President, taking an active part in the proceedings.

A correspondent of the *Bristol Daily Post* states that a working man, after 20 years' labour, at length solved the problem of perpetual motion! The secret may be had for the trifling sum of 100,000*l.*

this mine was erroneous. It should read, "From the run of Great Wheel Vor, Wheel Metal lode will form a junction with Great Wheel Metal lode near the shaft," &c.

LONDON, NOVEMBER 19, 1864.

As regards the mode of introducing the fresh air when artificial ventilation is adopted, the old system of forcing in the air seems to be preferred to the exhausting system. They tried, says Captain FRANCIS BARRATT, the exhausting system for some years at East Crinnis, having been advised to do so by the principal manager, and they found that they could not drive their levels very far, so they returned to the forcing principle, and found that they could drive a considerable way further. He did not consider a main pipe, with branches to the different ends, would be very

COPPERING IRON SHIPS.—A mode of coppering iron ships, so as to secure freedom from galvanic action, and at the same time attach the sheathing firmly, has been invented by Capt. Warren, and is at present in use at the works of Messrs. Brown and Simpson, iron shipbuilders, of Dundee. The bottom of the ship to be coppered must be first thoroughly cleaned, and when dry coated all over with Hay's varnish, which must be applied whilst hot. The bottom of the iron ship is then covered with the insulating material used by Capt. Warren, which is a kind of felt of about a fourth of an inch in thickness, and the edges of the layers of this material are lapped over each other for a couple of inches, to insure perfect insulation. The iron is then put on by means of marine glue on it and on the ships' plating, and pressed hard home—the process presenting little mechanical difficulty. After the ship's bottom has been covered, the outside of the felt or insulator is coated with marine glue upon the parts which are to receive the copper. The copper, which must be previously coated with varnish, is then placed upon the glued felt, the edges of each sheet and layer overlapping the others, the same as in the case of wooden ships. Along these edges nail-boards have been driven for small nails to rivet them together—

though the copper sticks quite strongly enough to the felt, the edges which overlay each other are the better for being thus riveted. The nails for this purpose are very ingeniously contrived, the points of the two sheets of copper being in contact with the rivets, and the rivets are opened out—thus forming, as Captain Warren says, a perfect clench. The effect of the water wash at the part of the side where the copper leaves off has also been provided against by Capt. Warren, who carries right round the vessel a batter or beam, on which the upper edge of the copper is fastened, but which is bevelled in towards the ship's side at its downward edge, so as not to twist the copper violently. The plan is considered thoroughly effective, and has already had a trial by the Government, who report in highly favourable terms of its success. Admiral Elliott, of Portsmouth Dock, writes that he considers it the best which has yet been tried; and the master of the shipwright at the dockyard also writes that when a vessel which had been covered on shipwright the system was being repaired, the copper adhered so firmly to its sides that an axe had to be applied to separate it.

FOREIGN MINING AND METALLURGY.

A slight improvement is noted in the tone of the foreign copper markets. No great animation has appeared at Paris, but prices have been more firmly supported, English, in plates, making 91½; Lake Superior, 104½; rough Cuillin, 66½; and Corcoro mineral, 88½ per ton. Tin remains in much the same position on the Dutch market, and finds very few purchasers, notwithstanding the low prices current. There has also been generally but little activity in lead. The position of zinc appears to have slightly improved; the markets, it is true, still display hesitation, but the symptoms are more favourable. The Vieille-Montagne Company had decided on making a reduction of 2½ per cent. in the price of its products, but in the more favourable tone of the London market it is now doubted whether the reduction will continue.

At St. Dizier iron has been in rather feeble demand of late, and some works have been soliciting orders. Water is accumulating little by little, and the works will be soon again in a position to put forth all their strength, and this is the reason why some forges are seeking engagements. Prices remain without any change, charcoal-made pig being dealt in by continuation at 4½. 12s. to 4½. 14s. per ton. Advances from Longwy, in the Moselle, state that the forges of that district have fair orders for merchants' iron. The season has not been favourable in connection with construction iron, a stock having accumulated which is likely to increase. Deliveries are being made to Switzerland. Within the radius of the triumvirate prices remain the same; upon other markets holders sell as well as they can. Later, for an important affair, with deliveries at Paris, there was only a difference of 4s. per ton between the rates of a forge of the Ailler and that of one of the forges of the triumvirate, although the latter establishment finds itself placed in very different circumstances to that occupied by the forge of the Ailler. The circumstance is considered to show that the triumvirate is not so completely master of the situation as might be supposed. The group of the Nord also carries on an inveterate competition against the triumvirate; it is said the forges of the Nord have been dealing with affairs for England, especially in plates. Many orders are received in the Moselle for coke-made refining pig; it is difficult to state prices exactly, but they range from 2½. 19s. to 3½. 4s. per ton. Hesse, it appears, is about to devote itself to the production of charcoal-made iron. Ottange will soon have a second furnace in activity. It is stated that the Gréville establishment has been sold for 14,000l. to some Carignan forgers. M. Jourd'heuil has applied for authority to establish a second furnace at Longwy. M. Jourd'heuil, of Hailonville, in the Meuse, contest the application. M. Jourd'heuil, of Cousances, in the Meuse, has appeared as an opponent of the application. M. Jourd'heuil, of Cousances, in the Meuse, has appeared as an opponent of the application. M. Jourd'heuil, of Cousances, in the Meuse, has appeared as an opponent of the application.

The direction of the Customs has published a statistical statement of the foreign trade of France during the first nine months of 1864. On the eve of the reduction of duties, which took effect Oct. 1, 1864, it will be readily understood that the imports submitted to duties were almost reduced to nothing in Aug. and Sept., but the entries by warrants show a continued progress. Thus while there were imported in 1864, 23½ tons of pig, 73 tons of iron, and 3½ tons of plates paying duty, there were admitted free by means of warrants 17,208½ tons of pig, 855 tons of iron, and 284½ tons of plates. In presence of these totals protective duties are illusory, since imports are made by warrants just as if they had no existence. The recent reduction of Customs' duties does not appear to have occasioned a notable increase in the importation of foreign iron into France, and in fact, the present prices of French products are so low that they must naturally interpose an obstacle to the development of an extensive import trade. The reduction of import duties seems, however, to have produced a more sensible effect on pig; if we may credit the statements made, the import of pig has regained more activity. As regards other French topics, we may note that a canal from the collieries of the Sarre, intended to furnish coal at a low price to the industrial establishments of the East of France, is being executed, thanks to the assistance of the parties interested, with exceptional rapidity; unfortunately, however, a sum of 400,000l., advanced to the State for these works by the manufacturers of Alsace, is on the point of being exhausted, and if the administration does not promptly open credits out of a fund of 120,000l. placed at the charge of the budget in favour of this enterprise, the execution of the canal will be suspended, to the great prejudice of the numerous interests to which it is likely to give satisfaction. The Council-General of the Bas-Rhin has become uneasy at this state of affairs, and has earnestly solicited an allocation of Government funds to stimulate the prosecution of the works. This allocation does not seem, however, in the budget of 1865. The Western of France Railway Company is now constructing a great iron bridge near Elbeuf, intended to carry over the Seine a new line, which will run direct from Rouen to Paris and Cherbourg line. The bridge reposes on five cast-iron tubular piers, placed at a distance of 166 feet apart, so that the total length of the bridge is 933 feet. Prepared to receive two lines of rails, the breadth of the structure is nearly 32 feet. The girders have been erected on the piers without scaffolding, by the Creuzot Company. The whole structure was put together on the banks of the river, and raised to the piers in 18 hours by an ingenious mechanical process, involving the labour of only 18 men. MM. Schneider and Co. did the same with the great Fribourg Viaduct, in Switzerland.

The reports published by Chambers of Commerce in Belgium afford a very valuable insight into the actual position of industrial affairs. By this means the causes of progress or retrogression are indicated, and the desires of commerce are stated, so that the Government has the opinion of the country for its guide in regard to its industrial policy. Independently of the Chambers of Commerce, the Government established three years since a Superior Council of Trade and Industry, composed of delegates from each of the Chambers, with whom are united the high functionaries of all the inferior bodies, and, before any decision is taken by the Government in regard to any economic reform which may be invited, all possible enquiries are made. A recent report by the Mons Chamber endeavours to show, with elaborate care, that the basin of the Couchant has been ill-treated for some years. According to this report, the coal production of Belgium amounted in 1863 to 10,345,300 tons, against 9,935,645 tons in 1862, 10,057,163 tons in 1861, 9,609,895 tons in 1860, and 9,160,702 tons in 1859. These totals were made up as follows by the various seats of production:—

Year.	Mons.	Centre.	Charleroi.	Namur.	Liege.
1859	3,007,134	1,098,760	2,993,532	220,850	1,840,926
1860	3,012,615	1,178,600	3,315,505	204,528	1,898,647
1861	3,247,969	1,233,055	3,454,680	243,061	1,878,475
1862	3,274,731	1,377,459	3,542,903	246,500	1,933,975
1863	3,203,397	1,319,476	3,578,230	255,667	1,988,561

The coal-production of Belgium was thus carried last year to a point which it had never before attained. Neither the consumption nor export followed a corresponding progression; and, from the excess of the offers over the orders, a profound depression resulted in transactions, a more than ever arduous competition, and a great reduction of prices. The word, producers last year, and harder and gained less. Some further statistics will illustrate very clearly the state of affairs. The augmentation in the consumption of coal in Belgium has been very sensible; in 1854 it amounted to 5,322,000 tons, in 1863 it had risen to 7,088,000 tons, showing an increase of 33 per cent., a proportion equal to the rate of progress accomplished in England during the same period. In 1854 the production was only 7,950,000 tons, while last year it was 10,345,300 tons, or, ten years since coal mining industry was obliged, in order to meet both the export and consumptive demand, to utilise all its strength. Now, in order to run off its production, it must have more recourse to foreign markets. The question is whether the old outlets can be extended. There are serious reasons for doubting whether this can be effected; it may even be affirmed that it will be difficult to preserve their present importance, as the coal basins of the Nord, the Pas-de-Calais, and the Sarre, which business in France in the coal of Mons and Charleroi, while the basins of the Centre and Liège have to compete with the mines of the Ruhr. The Belgian coal trade requires, then, a more ample clientele. Besides the inhabitants of Western Europe, who are highly advanced in civilisation, other people employ mineral combustible, and with these latter it is considered that the commercial relations of Belgium, now almost insignificant, might be largely extended. Accordingly, we find the cultivation of a maritime export trade recommended as a duty by the Mons Chamber of Commerce as it has been by the Charleroi Chamber. The Government has acceded to the thrice-expressed wishes of the Mons Chamber, by adopting on the railways of the State a special tariff of 0.48d. per ton per mile for the carriage of coal destined for seaports. It is now contended by the Mons Chamber that port expenses must be diminished, as they are relatively higher than those current in England. Thus accounts established by the Chamber of the port expenses of a ship of 400 tons burthen at Sunderland and Antwerp show that, leaving brokerage out of account, there is a large difference against Antwerp. Thus, at Sunderland the port expenses amounted to 37½. 2s. 8d.; while at Antwerp they were 60½. 13s. 5d. A closer equilibrium, it is contended, must be established, more especially as Sunderland is, of the two ports, the most commodiously fitted up. The Mons Chamber renews the expression of a wish that the Government would, by an allocation of the necessary subsidies, encourage the foundation of regular steam services directly uniting Antwerp to the principal maritime markets. The Escout has been recently freed, and Antwerp will soon be able to dispose of extensive tracts of land in order to improve its commercial service. A maritime export trade having become a necessity, we may almost regard it as certain that the efforts of industrialists, of Antwerp merchants, and of the Government will be attended with happy results. The annual production, per pit of extraction tends rapidly to increase in Belgium. Thus, in 1862, it was 30,162 tons in the Couchant de Mons, 27,236 tons in the Centre, and 21,947 tons at Charleroi. In 1863, it attained 44,492 tons at Mons, 38,833 tons in the Centre, 36,889 tons at Charleroi, 11,116 tons in the province of Namur, and 20,500 tons in the basin of Liège. The progress made was thus especially rapid in the Charleroi group. The rate of production depends evidently on the richness of the basins, the height of beds, &c.; but in these respects the Belgian basin may be fairly compared with the coal groups of England, with the exception of Durham.

The meetings of two or three industrial companies have been held recently in Belgium. Thus, the Cockerill Company, at Seraing, has just reported progress for the exercise ending June 30, 1864. The results attained in the exercise 1863-4 enable a dividend of 2½ per share to be paid to the shareholders. Thus, the rough profit realised was 69,735l., and the net profit 41,300l., arising from transactions to the aggregate amount of 494,815l. The Cockerill

Company comprises a number of operations and establishments, the direction of which has constituted serious difficulties. The report just presented to the shareholders announces the adoption of a new organisation, which greatly simplifies and improves the arrangements in force. A portion of the coal obtained from the mines of the company, and which has been sold abroad, has been disposed of at comparatively unremunerative rates. The products of the mineral bearings also owned by the company have been run off on satisfactory conditions, especially during the first six months of 1864. The results obtained by the company's blast-furnaces and iron and steel works in 1863-4 were unfavourable, since these "chapters" in the accounts result in a deficit of 866l. The construction workshops, and a naval yard at Antwerp, have made during the past exercise some engines for Russia, and also two armour-plated gunboats for the same Government. These deliveries were made profitably. The statutes have just been approved of the Compagnie des Laminiers du Centre Belge, formed with a capital of 400,000l., represented by 2000 shares of 200l. each. The number of shares now subscribed for is 1100, and the other shares will be issued in proportion as it is found necessary to offer them to the public. The object of the company, whose centre of operations is at La Louvière, is the fabrication of every description of iron which can be produced in rolling works, but attention will be more particularly devoted to the production of plates.

THE SLATE TRADE.

The following is a list of the present prices of slates at the various quarries in Wales; if this be compared with the list in the first edition of the "State and Prospects of the Slate Trade," it will show an advance of 10 to 15 per cent.; and at the meeting of the trade, to be held in January next, to fix the prices for the year, it is probable that another advance may take place:—

Size.	Best.	Seconds.	Price per M of 1200.	Will cover about sq. yds.
24 by 14	75	92	£10 17 6	£9 0 0
24 by 12	60	81	9 9 0	7 7 0
24 by 12	55	70	7 15 0	6 0 0
22 by 11	50	63	7 5 0	5 15 0
22 by 10	50	63	7 5 0	5 15 0
20 by 12	50	60	7 2 0	5 12 0
20 by 10	40	57	4 8 0	4 13 0
18 by 10	30	42	4 15 0	3 5 0
18 by 9	31	42	3 15 0	3 5 0
16 by 12	32	46	4 15 0	3 5 0
16 by 10	31	42	3 10 0	2 17 0
16 by 9	28	35	3 2 0	2 5 0
16 by 8	25	33	2 15 0	1 19 0
15 by 10	28	35	3 3 0	2 7 0
14 by 10	26	33	2 15 0	1 19 0
14 by 9	25	32	2 2 0	1 13 6
13 by 10	22	27	1 17 0	1 11 0
13 by 7	18	21	1 4 0	1 1 0
12 by 10	23	28	1 10 0	1 5 6
12 by 8	19	25	1 1 0	1 0 0
12 by 6	15	—	0 13 6	—
12 by 5	—	—	0 15 6	—

REPORT FROM NORTHUMBERLAND AND DURHAM.

Nov. 17.—The Coal and other trades here continue, on the whole, extremely good. On the Tyne, iron shipbuilding is going on at a prodigious rate, and also very briskly on the Wear and Tees. A large iron vessel was launched on Monday, at Jarrow, and several others are in course of construction there, and also at other places on the Tyne. At Hebburn Iron Shipbuilding Works there are no less than five large vessels on the stocks. An account of the quantity of coals sold in London during the past ten months is a most instructive document. It shows first, most clearly, that the place which consumes and pays for such an immense quantity of the best coal in the world must be of great magnitude, and contain immense wealth. It gives some idea, also, of the rate at which the fossil fuel of England is being consumed; and, as the consumption is increasing very rapidly, it is hardly possible to avoid having some apprehension as to the exhaustion of the best coal beds. The total quantity delivered by sea during the ten months has been 2,592,454 tons; and by rail and canal, 908,020 tons 18 cwt., against 2,692,908 tons and 1,438,115 tons 7 cwt. in 1863, thus showing a decrease of 100,454 tons shipped by sea, and an increase of 469,905 tons sent by land carriage. The total quantity of coals sent to London during the same period having been in 1864, 4,500,474 tons 18 cwt.; and in 1863, 4,131,023 tons 7 cwt.—an increase of 369,451 tons 11 cwt. It will be seen that the whole of the increase is due to the inland trade, there being an actual decrease of 100,454 tons in seaborne coal. The quantity of coal sent to London by rail is, therefore, very rapidly approaching the rival trade by sea, and there is every prospect of it shortly reaching the same magnitude. There is no doubt, however, that the best kind of house coal is still supplied by the North, and the quantity of this kind of coal may possibly be increased when the Tyne collieries are drained, and the reserves of High Main coal made available. It is well known that this seam has furnished the best house coal ever worked. At any rate, there is a good demand for coal of all kinds, and a better time for the drainage of this valuable coal could hardly be desired. With respect to the Hutton seam best house coal, an increase in the supply from that celebrated seam can hardly be looked for; a decrease, indeed, is more likely to take place at no very distant date.

The railways proposed to be formed by the North-Eastern Company, for which application is to be made during the next session of Parliament, are, some of them, of great importance to the district. One is the branch line proposed to be formed from Pelaw Main to the rising and important town of Jarrow, and so on to Tyne Dock. The Team Valley branch is also to be completed and extended, and railways are to be constructed in Rosedale and at Pilmoor. Application is also to be made for the amalgamation of the Cleveland Railway with the North-Eastern, and also for the amalgamation of the West Hartlepool Railway with the North-Eastern. The latter amalgamation is of great importance, and will be equally beneficial to both companies. Attempts were made some years ago to connect these two schemes, but the position of the West Hartlepool Company prevented this; it is, therefore, matter for congratulation that the financial difficulties which formerly intervened have been removed, and the way paved for this much-desired amalgamation. The West Hartlepool Railway Company have sold several of the collieries held by them, and are still continuing to sell the remainder as opportunity offers. At present the Byers Green Colliery is advertised for sale. This is a most important place, comprising a large royalty of upwards of 1000 acres. The coal makes excellent coke, which is well known in the market, and in much request for locomotives and for blast-furnaces, &c.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Nov. 17.—There is a degree of improvement in the demand for iron, and a more confident feeling is indicated, the consequence of the reduction in the rate of discount and the increased ease since manifested. In some cases more orders have been received during the week, but as yet the actual improvement is trifling. The works are not generally busy, but they go on fairly, bars and hoops being the weakest elements in the trade. In some cases orders are being taken below the trade rates. Pig-iron is not selling extensively. The price is now very low in comparison with the rates of wages, and the margin of profit is very small, except in cases where the producers are proprietors of valuable mines under favourable circumstances. Foreign competition presses very severely on the producers of pig-iron in South Staffordshire. North Staffordshire pigs are not coming to the South in very large quantities. Earl Granville is greatly extending his works at Eturia, and the North Staffordshire makers are finding it more advantageous to convert their pig-iron into manufactured on the spot, using hematites as mixtures. They thus save carriage of pigs from South Staffordshire, the carriage of hematite to South Staffordshire, as it passes the north of the county to reach the south, and also the carriage of the finished iron by the same distance in transport to Liverpool, to which they are nearer.

An effort of the colliers of a Longton firm to obtain a rise of 3d. per day has failed. The other masters decided to support the firm in resisting the demand, and last Saturday, when the notices expired, they were withdrawn, and the men have gone in at the former prices. There is a shadow of persistence in some parts of South Staffordshire in the strike, but there are as many men at work as are wanted. At the present moment, with contracts running with distant places, the demand for coal is very quiet, and some of the collieries have very little to do.

When the combinations of colliers and ironworkers were being effected last year, it was suggested in this letter that the vastness of the organisation would prove its weakness. This has been illustrated during the week by the split at the Conference at Manchester, when Mr. Kimberley, the South Staffordshire candidate for the presidency, receiving equal votes with Mr. McDonald, whose period of office had expired, and the latter was re-elected by the casting vote of the Chairman. It was a clear case of North and South, only that the dissentients include many in the northern districts, as did the votes for Davis against Lincoln.

The Ironworkers Association for the Great Bridge district, in South Staffordshire, held a meeting on Saturday evening. It was stated that after

paying 733l. to the men locked out at Leeds a balance of 207l. remained in hand; and, as the payments to the Leeds men had ceased, it was expected that the funds would now rapidly augment. It was stated that the funds of all branches of the association, in all parts of the country, amount to the sum of 20,000l.

The question of the election of Chairman of the Ironmasters' Association is still under consideration. It was at first supposed that Mr. James Bagnall, who has now the whole responsibility of the great firm of John Bagnall and Sons resting upon him, would not be induced to accept the office, but the feeling is strong that if he would his appointment would meet with general concurrence.

Eight men were killed by the breaking of a pit chain at Messrs. Nock and Wood's colliery, near Dudley, yesterday evening (Wednesday). The skip was lowered at about 6-15, with a boy in it, and some pikes for the nightmen. As it was ascending, when about half-way up, there was a fearful scream, and a cry of "O Lord," and the skip and eight persons fell to the bottom, and about 85 yards of chain upon them. All were dead when the hanger-on, Slater, went to them, and the first he saw was his own brother, whose head was cut off by the chain. An inquest is fixed for to-morrow (Friday), when the cause of the accident will be fully enquired into. Scarcely any accident occurs without some violation of the rules coming to light. In this case eight men entered the skip, and the hanger-on told one to get off, which he did, but just as the skip was ascending a lad jumped on it, and, of course, lost his life.

REPORT FROM DERBYSHIRE, YORKSHIRE, AND LANCASHIRE.

Nov. 17.—Though there is an increased ease in the money market, the Iron Trade is still quiet; there is little doing except for immediate requirements; many orders are kept in abeyance, and will be until the demand for money becomes less active. There is a slight business in pigs and bars, but not such as to be generally felt. The stocks in the hands of merchants are known to be small, but the dearth of money is prejudicial to speculative purchases. The demand for iron for export is very active, and there are some good continental orders on hand. The Coal Trade is very active, and as the demand for the London and southern markets continues to increase, and owing to the strike in Staffordshire, many new contracts have been taken; but the general demand has been and is so active, that most collieries have as many orders as they can accommodate. It is remarkable what a railway company can do in the event of an emergency. The strike in South Staffordshire left most of the ironmasters without a supply of coal. The Great Western carried into the district in one month no less than 25,952 tons, and the increase in the number of wagons was no less than 5118. The coal trade in Lancashire is exceedingly good, and we hear of improvement in Lancashire, owing to the larger arrivals of cotton. The Steel Trade is reported to be improving, not only as regards home demand, but also the export trade. Manufactured cutlery is in great request, both for France and Germany. The town of Sheffield, the emporium of the steel trade, received on Wednesday the honour of a visit from General Todleben, the chief military adviser to the Russian Emperor Alexander. He was met at the railway station by Mr. Brown, the chief of the Atlas Works, and Capt. Blakeley. They proceeded in Mr. Brown's carriage to the works, where the General inspected the manufacture of some of the largest armour-plates yet made. He witnessed the piling together of the plates until one 13½ inches thick and 7 feet wide had been completed. Another object which interested the General was the manufacture of a cupola for land defences, which the firm are building for the Belgian Government, for the defence of Antwerp. It is the first of the kind that has been made. It is about 28 feet in diameter, is to mount two monster guns, and will be placed upon a considerable altitude upon massive masonry, so as to command both sea and land. The cupola is circular in form, and in section the lower plates, or rim, stand vertically for a height of 6 or 7 feet; above this the next tiers of plates (which are pierced for the guns) slope inwardly at a moderate angle, sufficient to divert any shot by which they may be struck, and thus prevent mischief from an enemy's guns. The General was highly delighted with an inspection of this cupola, as was he, also, with his visit to the hammering shop, where a new steam-hammer has just been set to work capable of striking a weight equal to 18 tons. He next viewed the manufacture of steel shot, the making of steel by the Bessemer process, the rolling of iron and steel plates, &c. He also visited other large establishments, including the works of Messrs. Naylor, Vickers, and Co., and Messrs. Firth and Sons, and was perfectly astounded at the nature and extent of the trade carried on by these firms.

The applications for Letters Patent include—Mr. W. L. Lees, of Aston, for a new composition or cement for uniting or joining substances together, and for other purposes; Mr. G. Smith, of Bradford, for improvements in machinery or apparatus for drying or desiccating materials or substances containing moisture; Mr. E. Richardson, of Ravenshoe, for improvements in means and apparatus for producing or effecting fog signals; Mr. H. W. Ripley, of Bradford, for improvements in preparing wool and hair for the manufacture of yarns and piece goods; Messrs. John and Joseph Farrar, of Elland, for improvements in card covering for carding fibrous substances; Mr. John Firth, of Sheffield, for improvements in the manufacture of steel and iron; Mr. T. E. Vickers, of Sheffield, for improvements in the manufacture of steel castings.

REPORT FROM MONMOUTH AND SOUTH WALES.

Nov. 17.—The resolution of the Bank directors to reduce the rate of discount 1 per cent. has given a certain amount of ease to the Iron Trade, but nothing in comparison with what is the case with other trades. Another 1 or 2 per cent. reduction would, no doubt, favourably influence the trade, and give it a decided stimulus, and until this is done much improvement need not be expected, on account of the price of money. During the turn-out in Staffordshire, many buyers that formerly had their orders executed in that district had to resort to South Wales, and the manner in which they were met by the Welsh makers has told to the advantage of South Wales. Orders are now coming in from houses that formerly confined themselves to Staffordshire, and there is no doubt that the Welsh ironmasters are making special efforts to retain the connection thus formed. From America there is no change to report, the enquiry being, as stated last week, a little better than a month ago. In Tin-Plates, buyers on India and China account are giving out orders more freely. The shipments to New York are still comparatively low. The same activity characterises the Steam Coal Trade as mentioned last week, and the house coal proprietors are also doing a large business. Coasting freights are going up, and this fact tends to check the coal shipments coastwise. Coke, patent fuel, and preserved coal remain without any material change.

The Aberaman Ironworks (late Crawshaw Bailey's) and estate have been surveyed and valued by Mr. S. H. Blackwell, at the request of the directors, who also deputed three members of their board—Messrs. R. Read, J. Marshall, and Bonamy Price—to visit and inspect the property before concluding the purchase. These gentlemen, from their own observation, and from information furnished to them by the manager of the works, by Mr. J. Richardson, Mr. L. Jones, and by Mr. Blackwell, who accompanied the deputation, have come to the conclusion that the price of 350,000l., at which the purchase has been made, is fair and reasonable, and such as will enable the company to carry on the works to great advantage.

The first of Mr. Scott Russell's iron ships was launched at the ship-building yard, Cardiff, yesterday (Wednesday). The christening ceremony was performed by Mrs. G. T. Clark, of the Downalls Ironworks, amid the plaudits of thousands of spectators. The steamship has been built for the Spanish Government, and is intended to convey the mails between Barcelona and Majorca, and she has, therefore, been called the *Majorca*. The following are the dimensions of the vessel:—Length over all, 223 feet; breadth of beam, 26 feet; depth, 15 feet. When loaded, and steaming at the rate of 12 miles an hour, she will draw 8 feet of water, and her measurement is for 700 tons burthen. The *Majorca* is a paddle, fitted with oscillating engines of 150-horse power, supplied by Messrs. Jackson and Watkins, London. The iron for the hull, which is composed of plates of an average thickness for vessels of her class, was made by the Downalls Company. As may be naturally expected, the event was celebrated by great rejoicings at Cardiff, and Mr. Russell entertained a numerous party at a champagne breakfast after the launch, and in the evening a public dinner was held at the Angel Hotel.

A special meeting of the Monmouthshire Railway and Canal Company was held yesterday (Wednesday), at the offices, Newport, Lord Tredegar in the chair. Mr. Harrison (the secretary) read the notice convening the meeting, for the purpose of confirming or otherwise a proposal to subscribe 20,000l. towards the proposed Alexandra Dock, to be constructed on the west side of the river. Mr. Crawshaw Bailey, M.P., moved that the sum mentioned be subscribed, and gave as his decided opinion that the present dock accommodation was insufficient for the increasing requirements of the port. He referred to the vast iron and coal fields of the district not yet developed, and expressed his belief that once ample dock accommodation was provided an increasing trade would rapidly flow in. Mr. Thomas Brown seconded the proposition, and, in doing so, said he was of opinion that in advocating dock extension he was not only advocating the interests of the Monmouthshire Railway and Canal Company, but also the interests of the old Dock Company, of which he was a director. Mr. Cartwright maintained that the present docks were sufficient for the requirements of the district for years to come, and he advised the shareholders to pause before voting the proposed subscription. Mr. Lyne, Mr. Overton, and Mr. Hamfray took the same view as Mr. Cartwright, while the resolution was supported by Mr. G. W. Jones, Mr. E. J. Phillips, and other gentlemen. Mr. Cartwright remarked that no one seemed to

know who were the men of capital in the new undertaking, and they should at least be condition to the resolution that the new undertaking of the North-western Company should be made by the old. He found that it was not the intention of the old company to deviate the Eastern Valley traffic at a point about two miles from Newport. Mr. Cartwright, M.P., said he saw no objection to the addition suggested by Mr. Cartwright to the resolution. The deviation referred to would be injurious to their property, and he would not subscribe a fraction to the dock unless that deviation was done away with. After some further discussion, the resolution, as amended, was carried by a large majority.

The negotiations which have been going on for several weeks past between the Great Western and Vale of Neath Companies were brought to a successful termination on Friday last. The Great Western Company have agreed, subject to the approbation of Parliament, to lease the Vale of Neath at a rent of 5½ per cent. per annum on the ordinary capital and payment of the preference shares, the Vale of Neath Company to participate as well in the profits over and above the payment of the dividends mentioned. The colliery proprietors and other large freighers on the Vale of Neath, are rather against the amalgamation, as they fear that the Great Western Company will manage the traffic badly, as was the case previous to the construction of the Swansea and Neath line. It is reported, however, that Mr. Joshua Williams, the general manager of the Vale of Neath, will continue to occupy the same position after the amalgamation is carried out, and this is a guarantee to a certain extent that the present facilities will not be interfered with. The completion of the new smelting works at Bury Port, Briston Ferry, has been celebrated by a public entertainment, at which Mr. E. Aubrey presided. The health of Mr. D. A. Onslow, one of the proprietors, was drunk with enthusiasm, and the Chairman and others who addressed the assembly expressed an opinion that there was a good future in store for Bury Port and Pembrey. The new works are expected to be in full operation in about a month.

SWANSEA.—It may be interesting to many distant readers of the Journal to know that the gentleman unanimously appointed to fill the office of Mayor of Swansea for the year ensuing is Mr. Charles Richardson, shipbuilder and shipowner, and brother of the well-known firm of Richardson and Co., copper ore merchants of this part. Litigation looms in the future, in connection with the Harbour Trust. At a meeting of the trustees, on Monday, the clerk stated that the Duke of Beaufort had filed a bill in Chancery against the Trust, with the view of restraining the trustees from taking lands, which they were advised by the engineer and superintendent were necessary for the purposes of the Act of 1864. The clerk was instructed to file an answer and oppose the motion. It seems that the trustees have scheduled off more land than the Duke's agents think they require, and that the Duke is not willing to part with more property than such as is absolutely necessary. I am bound to say that there are good grounds on the part of the Duke for making the objection—too great a grasp of land on the part of the trustees being objectionable in many ways. It is to be hoped the matter will be amicably arranged. Trade generally continues brisk in all departments, and particularly in the staple of the port, as the following arrivals since my last will show:—

The arrivals at Swansea include—The Capella, from Gothenburg, with 118 tons of zinc ore, for Manchester and Co., and 3 tons of copper ore, for Richardson and Co.; the Caroline Edward, from Cherbourg, with 220 tons of iron ore, for the Downland Iron Company; the Marquis of Worcester, from Caldera, with 254 tons of silver ore, 212 tons of silver and copper regulus, 83 tons of copper ore, and 82 tons of copper ore, for the Countess Beattie, from Cuba, with 530 tons of copper ore, for Richardson and Co.; the Dorsetshire, from Cumbuco, with 250 tons of unwrought copper in bars, and 250 tons of copper ore, for C. Lambert; the Vinodora, from Guayaquil, with 170 tons of copper ore, for H. Bath and Sons; the Croydon, from Hongkong, with 516 tons of copper ore, for Richardson and Co.; the William Luckie, from Caldera, with 444 tons of copper regulus, 80 tons of copper ore, and 97 tons of unwrought copper in pigs, for H. Bath and Sons; the Hecla, from Cuba, with 627 tons of copper ore, for the Cobre Mining Company.

ROYAL COMMISSION OF MINES—No. III.—REPORT.

ACCIDENTS.—The Commissioners have obtained no evidence of the existence of inflammable gas in any of the mines, and have only heard of a few instances of loss of life by influx of water. But while the men are free from the fatal effects of carbarretted hydrogen and the catastrophes occasioned by sudden influxes of water so destructive in coal mines, they, nevertheless, become victims to many accidents which care and forethought might easily prevent. The injuries which they sustain are principally caused by blasting, by falling from the ladders or from one level to another, by falls of the rock, and bursting of boilers. The agents naturally endeavour to shift from themselves the responsibility of these injuries, by attributing them to the recklessness of the men. The miners are unquestionably in many instances guilty of disobedience of orders, negligence, and imprudence; but they are not always so culpable as the agents are apt to represent them to be.—Blasting: In blasting the rock explosions which cause a loss of sight, fracture of limbs, and sometimes death frequently occur. These arise from sparks elicited by the use of iron implements in tamping or ramming in the powder, from improper tamping material, and the very reprehensible practice of picking out holes charged with powder which has failed to ignite. The miners also expose themselves to great danger from rushing in too soon to ascertain the cause of delay should the charge hang fire.—Falling away from ladders: The footways or ladders are often constructed in the drawing-shafts and pumping-shafts. When not properly bratticed or partitioned off, this mode of ascent and descent is necessarily dangerous. The wooden staves are apt to decay before it is observed, and the serious consequence of a vacant space or of a staff breaking while the miner is ascending or descending is obvious. Iron staves become worn and, consequently, sharp, and when wet or greasy, or, as occasionally happens near the surface, frozen, are apt to cause fatal accidents, although, were the footways properly protected by rollers and brattice-work, a fractured limb would be the extent of the injury to be apprehended from falling away. The staves are generally 10 in. apart, though the distance of 12 in. is still maintained in some mines, causing an extra strain on the muscles. The miner has frequently to bring up his tools with him, in order to take them to the smith's shop, and on these occasions any imperfection of the ladders is particularly dangerous.—Falling from one level to another: It frequently happens that the ladders for the purpose of ventilation, or the shafts for throwing down the stuff, which communicate from one level to another, are left uncovered, unprotected, or carelessly bridged over, or, if covered over, are not subject to constant inspection. Serious accidents have arisen in consequence.—Falls of the Rock: Injuries resulting from falls of rock are of frequent occurrence in some mines. In those localities where the rock or lode is of a friable or incoherent character, and, consequently, liable to slips and falls, extra vigilance is necessarily called for. It often happens that the men to save labour, and the agents to save costs, omit to put up the proper supports.—Falls of Staff: Casualties repeatedly occur from the fall of stuff on the kibble in its vertical run, or from the fall of the kibble itself from the chain breaking. In some mines there are to a considerable extent obviated by the adoption of skips with wire ropes and guide-ropes, which prevent oscillation.—Bursting of Boilers: Imperfect boilers are too often purchased for the use of a mine on its first being started, and the consequences, as might be expected, are frequent accidents. Another cause of boiler explosions arises from the chemical character of the water, which in some cases rapidly corrodes the iron, and in others forms deposits; and a third cause is the omission of a second safety-valve and of water-gauges, which necessary instruments the Commissioners have found only in rare instances, engineers depending entirely on the cocks to ascertain the quantity of water in the boiler. Further, it is the exception where the boilers are perfectly and thoroughly examined and examined. The men in charge of the engines are generally those who from ill-health or injury are incapacitated from working underground, and, not being trained engineers, stand specially in need of a water-gauge or an index to draw their attention when the water in the boilers is getting low.—Abandoned Shafts: Accidents arise not only to the miners but to the public from the very reprehensible practice of leaving abandoned shafts open and unprotected at the surface.

From March 1 to May 7, 1863, no less than seven fatal accidents occurred in the mines in Cornwall (including the very serious one at Budekall), occasioning in all a loss of sixteen lives. The Commissioners have been very anxious to ascertain the causes of these accidents, and Mr. Wylie's report thereon is given in an appendix. The mode in which coroners' inquests are conducted seems to be very unsatisfactory, inasmuch as the enquiry is limited to determine whether the death was accidental or not, without any reference to the cause of the accident from which it resulted.

GENERAL OBSERVATIONS.—Changing-houses: These buildings are often far from the footway-shafts, and are low and ill-adapted to their purpose. The light and ventilation are obtained from unglazed openings, provided only with wooden shutters, whereby thorough draughts are created, that are highly dangerous to the health of the miners just returned in a state of perspiration from the laborious ascent of the ladders. The men very frequently change in "the dry" (a place where they leave their clothes to be dried by means of heated iron plates), the atmosphere of which is often much impured, loaded with dust and vapour. In the absence of proper places for the purpose, the men often run the risk of injury to their health by washing in the open air, exposed to the inclemency of the weather, and are frequently driven to the dangerous practice of resorting to the boiler-house in order to change and dry their clothes. The Commissioners had the satisfaction of inspecting some changing-houses, with "drys" attached, put up at an expense of more than 1000l., well lighted and ventilated, and supplied with warm water; but they regret to say that such were rare. They have reason to believe that the agents and managers of mines are by no means insensible to many of the defects referred to, and that, as a body, they are anxious to promote the safety and comfort of the men placed under their control. With regard to established and well-managed mines, conducted with a view to the legitimate development of the mineral property, the proprietors will generally act upon any recommendations made by the agents, having for their object the health and safety of the miners; but there are many mines of a more speculative character, in which any outlay beyond what is absolutely necessary is avoided, as tending to diminish the dividends, and, consequently, to depress the price of the shares in the market. It is probable that in the latter the agents are deterred from suggesting every improvement, which to them may appear to be highly desirable, from the fear of being considered extravagant, and thus incurring the risk of losing their situation.—Wages: It is somewhat difficult to give a correct statement of the earnings of the men, in consequence of the speculative nature of their work. Miners are divided into tributers and tutwork men. They work in "pares" or companies of from two to eight men, and for eight hours at a time. The tributers' earnings are regulated not only by the amount and quality of the ore brought to the surface, but by its market value at the time it is sold to the smelters. Instances are quoted of 1000l. or more being realised in a month, and of tributers becoming owners of land and cottages; but the increased intelligence of the mine agents, and their ability in judging of the quality of a lode before striking a bargain, cause such instances to be now of rare occurrence, and in the event of a rich lode being discovered it is frequently worked by tutwork. Should a lode turn out poorer than expected, a tributer will work for weeks, and perhaps months, without earning anything. In most instances he is then allowed from 5s. to 10s. per week for what is called "subsidist," the sum thus paid standing as a debt against his future gains; consequently, there are times when the families of the tributers are very badly off, and many prefer the more regular wage of the tutworkmen. The latter take work by piece-work, and any variation of the ground after the time of setting affects their earnings; these are stated, on an average taken from several mines, to vary from 31s. to 35l. per month. The wages are frequently only paid once a month, with a small wages kept in hand. On a man first coming to work in many mines he receives no pay for two months, and the result is that he generally contracts debts to the smaller shopkeepers, and pays an enhanced price for the necessities of life. The payment of wages being in some instances partly in notes, for which change can only be procured in public-houses, the men are tempted to spend money in intoxicating liquors, from which they would otherwise probably abstain. The miners are frequently involved in debt, and are summoned in great numbers to the County Courts by travelling packmen and hawkers, who induce their wives and daughters to purchase goods, for which payment is to be made by monthly instalments. Considerable deductions are made from the nominal earnings of the miner, as shown by the "bal" or mine pay-bills, which are given in an appendix; but these are taken into consideration when the bargain is made. These deductions, though varying in different mines, include in all cases charges for clubs and doctors, for candles and powder, and for the wear and tear and sharpening of tools, besides in some mines other items of smaller amount. An extra charge beyond cost price for candles, powder, and materials, the purchase of which at the mines is obligatory on the men, is deemed necessary to prevent their wasting or selling them. A table showing the amount of candles and powder consumed in a number of mines and

the profit thereon will be found in an appendix.—Candles: These are in many instances of a very inferior quality, and, as will be seen by the report of Dr. Taylor, add materially to the impurity of the air while in the process of combustion. An idea prevails in Cornwall that it is necessary to have candles with wicks of mixed cotton and flax, for the purpose of blowing them in when accidentally extinguished, though such wicks give out more smoke than cotton wicks. The Commissioners, however, ascertained during their inspection in the North that cotton wicks if blown in equally well if the candles are made of the best tallow.—Clubs: The customary payment to the club attached to the mine varies from 6d. to 8d. per head per month. This money, in most instances, is only available for "visible hurts." The club, therefore, partakes more of the character of an insurance office against accidents than of a sick club. The fund thus contributed is considered to be the property not of the men but of the adventurers, and a separate account is not always kept. Should the mine be "knocked" or abandoned, the fund is added to the assets, and divided among the adventurers; the money thus apportioned has in some instances amounted to a considerable sum. This appropriation is made on the ground that any deficiency in the club money would be supplied from the false account, and that a just apportionment amongst the contributors would be impossible. The want of some means of supplying the men when off work in consequence of sickness with suitable food and wine is severely felt, and much complained of by the medical men.—Doctors: Besides the "visible hurt" club above-mentioned, the miners subscribe to a fund for providing medical attendance for themselves, and in some cases for their families. This sum varies from 6d. to 8d. per head per month, and does not include the charge for attendance in cases of childbirth. In some instances the miners choose their own doctors, but generally they are appointed by the adventurers or shareholders, and an impression prevails amongst the men that other reasons than those of professional qualification may influence the selection. The doctor often resides at a distance from the mine, and, therefore, unless he appoints a qualified assistant, proper medical aid is not very accessible to the sick miner. The system often gives great dissatisfaction, and, though some of the witnesses consider the election of a doctor by the men to be objectionable, there does not appear to be any sufficient reason why the miners should not be at liberty to apply for medical aid to any qualified practitioner residing in the district, who may be willing to attend them at the fixed rate of charge per head.—Food: Some improvement in the health of the miners has been ascribed to the habit now more generally adopted by the miners of taking water and food underground. In the St. Just district and other parts of the West of Cornwall the food preferred is bread and butter; in other parts the Cornish paste. This consists of chopped vegetables, with a little bacon, or occasionally fresh meat, enclosed in paste. This description of food is considered by the doctors to be unwholesome for men whose digestions are already weakened. The chief meal of the day awaits the miner on his return home; but its character must, in a great measure, depend on the wages earned and the judicious appropriation of the same. In order to counteract the exhaustion of the miner, consequent on climbing and the nature of his work, and to enable him to withstand the injurious effects of the bad air he inhales for so many hours, and the high temperature to which he is occasionally exposed, more animal food is said to be required by him than by those engaged in healthier occupations, and this in many instances he is unable to procure. The employment of girls at the mine from an early age deprives them of opportunities of acquiring a knowledge of cooking and housekeeping, and of becoming thrifty housewives. The miners, as a class, are well conducted and temperate; large numbers have taken the pledge, and kept it, and, whatever may be the cause of the diseases to which they are liable, the habit of intoxication cannot be assigned as one of them. They are particularly courteous and intelligent, and, considering their circumstances, and the early age at which they go to work at the mines, the information they have acquired, especially on religious subjects, is very remarkable; their proficiency in the latter respect is no doubt owing mainly to the Sunday Schools. The miner has many hours of leisure, and devotes much of it to the pursuit of works, often of a serious tone, and generally of a profitable character.—Cottages: Several cottages were pointed out to the Commissioners as being the property of the miners who resided in them. The general practice in Cornwall is to let ground for building on leases for three lives; the cost of building is reasonable, and a good substantial cottage, with a room and a scullery downstairs, and two or three bedrooms upstairs, can be built for about 80l. A tributer, if he has a venture, will often build a house, which he will let to a miner, and, in addition, a sum required. The Commissioners have found that while, generally speaking, the miner has fair house accommodation, yet in some, especially in outlying districts there is a great deficiency in this respect, both as regards quality and extent. The new cottages are substantially built, warm, and dry, with good-sized windows, opening from the top; but due attention is not paid to door-conveniences, and the sanitary condition of some of the towns and most of the villages is decidedly bad. The absence in most instances of a good supply of water, owing to its being drawn off at the low levels by the pumping-engines at the mines, is a drawback to sanitary improvements. Although these are not sufficiently attended to, the cottages in the districts where the miners are most numerous, yet this does not appear to account for the diseases peculiar to miners, as the women and children inhabiting those abodes are generally healthy. In many districts, and especially in the West of Cornwall, miners have gardens; but in the neighbourhood of the towns and villages the rent of land is so high as to preclude the possibility of this addition to their comfort.—Surface-work.—Employment of Women and Children: The work at the dressing-floors is partly carried on by a few men, disabled from working below, but principally by women and children, their wages being at the rate of 8d. to 1s. per day for the former, and 4d. to 6d. for the latter. Though the breaking of the ore is labourious, it does not appear to be more so than in other cases, and the women resort to their meals, and where an attendant sees to the fire and provides hot water. At others the accommodation for this purpose is insufficient, while in the majority none at all is provided. Where the comforts of those employed are attended to, the women and children work under cover of wooden sheds, with glass let into the roof; but in many, even in the large mines, they are needlessly exposed to the inclemency of the weather. Young children are employed at the work of picking the ore, and this employment, when carried on under cover, is not found to be prejudicial to their health.

[To be continued in next week's Journal.]

THE NATIONAL ASSOCIATION OF MINERS.

On Friday, Mr. ACKROYD, of Dudley Hill, Yorkshire, read a paper on Practical Mining and the Ventilation of Mines. It was resolved, "That having heard with pleasure the explanation, and seen and examined carefully the plans of Mr. Ackroyd, the Conference, so far as it can, pledges itself to the extent of its power and influence to aid in any way his well-meant efforts to ameliorate the moral and physical condition of the miners of the country." Messrs. Halliday, Normansell, and Scott, who had been appointed auditors of the treasurer's accounts, gave in their report, which caused some warm discussion. The account was eventually passed. Mr. Holmes, the treasurer, tendered his resignation, in consequence of certain statements which had been made against him. Mr. Holmes, who had been elected to the office, tendered his resignation, and Mr. Holmes, who had been elected to the office, tendered his resignation, and Mr. Holmes, who had been elected to the office, tendered his resignation.

On Saturday, Mr. McDONALD, whose term of office as President had just expired, proposed that the Conference should agree to adopt the constitution that had been acted upon from November, 1863, to that time, with the exception that the Conference should only elect a President, Vice-president, Secretary, and Treasurer, leaving it to the districts to elect their own councillors, and also to pay them when they sent them to the Council meetings to do their own work. Mr. SLATER seconded the motion.—In the discussion that ensued, Mr. CHEESMAN said if the motion were adopted so many councillors would be sent to the meetings that no business would be done.—Mr. SCOTT moved as an amendment, that the constitution should remain as it had been heretofore, and that the districts should elect their own councillors, and also to pay them when they sent them to the Council meetings, and to appoint other councillors in their respective districts, each district paying its own councillor. On the division, 18 voted for the amendment, and 24 for the resolution, which was consequently carried.—Mr. PEARCE moved, and Mr. BROWN seconded the re-election of Mr. McDONALD as President.—Mr. BEARD moved, and Mr. BENNETT seconded, as an amendment, that Mr. Kimberley, South Staffordshire, should be appointed President.—On a division, 19 voted for each candidate, and the Chairman gave his casting vote in favour of Mr. McDONALD, who was consequently elected. A great uproar then ensued among the delegates, in consequence of which it was agreed that the meeting should be adjourned until the following day, when it was held at the same place. It was then proposed that several of the delegates had instructions from their constituents to leave the Conference if Mr. McDONALD were re-elected President; and 19 or 20, acting upon these instructions, left the room. Those who remained included representatives from St. Helen's, West Bromwich, Oldbury, Bradley Hill, Dudley, Rhonda Valley, Abercromby, Abertillery, Durham, a portion of Gloucestershire, and Blaenau. Twenty-five delegates remained, including representatives of Farnworth, Kearsley, Worsley, South Yorkshire, North Staffordshire, West Yorkshire, Scotland, Tipton, Leeds, Shropshire, Cleveland, Hils, Haydock, and Wigan. After considerable delay the business was resumed. Mr. PEARCE, who was elected Secretary in the room of Mr. Holmes, Mr. Stevenson, Rothwell, was appointed secretary in the room of Mr. Hickman. Mr. Shenton was elected Vice-President in the place of Mr. PEARCE.—Mr. McDONALD took the chair, and the case of the men of South Staffordshire was considered, on the suggestion of Mr. MILWARD.—Mr. PEARCE said he would bring the matter before the Wigan district, and he moved that it should be laid before the various districts by the respective delegates present.—Mr. CHINELL seconded the motion, which was adopted. The President headed a subscription on behalf of the men of South Staffordshire. Mr. Holmes was requested to give up all books and documents belonging to the Association to Mr. Stevenson, and to accompany him to Wigan.

On Tuesday there were about 20 delegates present.—Mr. SCHOLEFIELD proposed, and Mr. KIRKPATRICK seconded, that the miners of Yorkshire, Lancashire, Scotland, Shropshire, and Staffordshire, representing 14,321 financial members—namely, Yorkshire, 3624; Wigan, 4258; Kearsley, 2500; Tipton, 400; Staffordshire (North), 700; Scotland, 2000; Shropshire, 439; Cleveland, 400—forming the Miners' National Association, should resolve unanimously to unite for the purpose of promoting the moral and physical condition of the miners of this country, and pledge themselves to use every effort for the attainment of that object.—The resolution was passed.—It was resolved that the next Conference should be held at Wigan, on Jan. 2.—On the motion of Mr. STEVENSON, seconded by Mr. HALLIDAY, it was resolved that the Conference had heard with very great pleasure the report from some districts, where the iron machines for getting coal were in operation for the purpose of superseding miners, that these machines were to some extent a success. The Conference held that it was a serious blot upon our science and civilisation that 1000 miners of this country were annually slain in the mines, besides a great number being permanently disabled; and they were of opinion that, for the sake of humanity, and that fearful accidents in mines might hereafter be prevented, the sooner these machines were got into operation throughout the mining districts the better, inasmuch as the miners would then have an opportunity of devoting their valuable strength and lives to a much more healthy and safer employment.—Mr. McDONALD (the President) said everyone present must be pained by the oft-recurring strikes throughout the country. They had already expressed their growing sense of the evil of these strikes. He was strongly of opinion that if a little profitable caution were exercised on the part of the working miners, and their boards or associations, strikes would be unheard of in any form. Strikes resulted from over labour. They never found a strike in the colliery districts when the wagons were waiting for coal, or when the consumption was more than the supply. They always found the strike when there was over production, or when there was coal or iron enough and to spare; and he held that if the miners in the various districts adopted a general system of restriction of labour, letting the supply be only equal to the demand, or scarcely equal to it, they would get a higher rate of wages, and banish strikes entirely. He would, therefore, advise the Conference to recommend that the various districts throughout the United Kingdom should speedily take up the question of restriction of labour, so that the supply would be always under the rate of demand. This was a matter that was being taken deeply into consideration in Scotland, where they were endeavouring to reduce the labour one-eighth. Scotland produced 12,000,000 tons of coal, and if that

were reduced one-eighth, it would be put under the demand point, consequently the men would be kept constantly at work, at a higher rate of wages. He would strongly recommend the various districts, instead of striking, to adopt a system of restriction of labour by diminishing the amount of labour, and in that way they would be able to keep their men from want, as they would live on that which they worked for, and the demand for coal would be secured. In 1844 this plan was adopted in Scotland. Mills were half: that was no sooner done than the coal began to disappear, and in less than six months, in consequence of the restricted labour, they increased the value of their work from 2s. to 5s. a day. The stocks of coal disappearing, that state of wages continued, and but for a division occurring among the men, wages would have continued high in Scotland to the present day. If that principle were adopted throughout the land it would tend to the social advantage of the miner, and would give him a high rate of wages, and more time for physical and intellectual enjoyment.—Mr. PEARCE, referring to the present state of affairs between masters and men in the Wigan and St. Helen's district, said a meeting of the representatives of 111 lodges had that day been held, and he could state that a false alarm had been felt that they were about to strike. They believed that they had arrived at a time when intelligence dictated a better course of action; such, in fact, as had been practically carried out on a former occasion, when by reducing their labour they got their 10 per cent. They had resolved to suspend the present question, and to solicit the President of the Masters' Association to furnish the market on the day when they got the highest point of wages, and also the exact prices the masters were receiving for coal at present. The masters had said that they could not afford to give the advance with the present prices; but the men required to be convinced of that by facts founded on figures. They would reconsider the question on the day fortnight, and he had no doubt that they would keep up the agitation until they got the 10 per cent., if they should have to restrict their labour for that purpose.—After the transaction of some formal business the Conference was brought to a close.

THE SECESSION FROM THE MINERS' CONFERENCE.—The members of this conference who left the Mechanics' Institution on Saturday, because of the re-election to the presidency of Mr. McDONALD, subsequently met at the Swan, Shudehill, where they held a conference on Monday and Tuesday. At this second conference a committee was appointed to draw up a code of laws for the guidance of another association, which it is proposed to establish, and to which all the mining districts are invited to subscribe. About 20,000 members were represented, and steps were taken with the view to form a national organisation. An executive council was appointed to conduct the business of the association, the members of which are all practical miners; and it was decided to hold the next conference at Derby, as early as possible.

NEW INVENTIONS.

PROVISIONAL PROTECTION for six months has been granted for the following:—
E. DAVIS, Chesham.—Improvements in machinery or apparatus for forging and shaping articles of iron, which is more particularly applicable to forging bolts, nuts, and rivets. Oct. 11.
G. HARRISON, of the City of London.—An improved process for purifying coal and ores. Oct. 7.
J. CASSELL, of the City of London.—Improvements in treating coal, peat, shale, wood, and lignous products, and in obtaining fuel, oil, and other products therefrom. Oct. 10.
F. NOBLE, 2½, James-street, St. George's-in-the-East.—New and improved machinery for raising and applying water and other fluids. Oct. 13.
J. SHAW, London.—Improvements in coffer-dams and in apparatus to be used therein, and in sinking cylinders and tanks for making foundations under water. Oct. 20.
W. E. NEWTON, London.—Improvements in safety-fuses for blasting. Oct. 17.
J. G. JONES, Monmouthshire.—Improvements in machinery employed in getting coal, stone, and other minerals. Oct. 21. [and drawing the same. Oct. 13.]
J. ROBBINS, Lambeth, Surrey.—Improved machinery or apparatus for driving piles.
LETTERS PATENT have been issued for the following:—
R. H. SMITH, Inner Temple, London.—Improvements in treating clay, artificial stone, metal, or other plastic or malleable material to render it more suitable for constructive purposes. April 29.
JOHN LITTLE, Adelphi-terrace, Strand.—Improved pavement for streets, roads, thoroughfares, footpaths, passages, stairs, and other ways; also for platforms, coverings, roofs, and other parts of buildings, and other erections. April 29.
E. H. NEWAY, Leicester.—Improvements in the manufacture of iron and steel. May 3.
B. SMITH, Birmingham.—Improvements in apparatus used when drawing iron, steel, and other metal tubes. July 13.
R. D. DWYER, Liverpool, Lancashire.—Improvements in apparatus for cleaning, bleaching, and dyeing woven fabrics and piece goods. May 12. L. DE FONTAINEMOREAU.

STEAM-BOILER EXPLOSIONS.—To prevent these serious occurrences is, doubtless, a cause of anxiety to every man using steam power. The loss of life and property attending these catastrophes is too well known to require more than a passing notice, the results being lamentably familiar in all districts where this agency is employed. Happily, increasing attention to the subject is manifested by the establishment of associations, which are making boiler inspection a special branch of their business. This, in itself, is worthy of all praise and support, the inspectors being, doubtless, practical men, thoroughly conversant with the application of steam power in its varied details. There is another class of persons, however, who have the boiler or boilers under their constant management or inspection—the engine-man or engine-driver. These are, undoubtedly, the true inspectors; on their observation and attention reliance must be placed; and, dependent on their watchfulness, every moment untold wealth and valued human life is entrusted to their keeping. In a recent case, it was given in evidence that the gimblet, or valve which regulates the supply of water to boilers, was open, as if the person in attendance was aware of the water supply in the boiler being deficient. This fact, in other circumstances, which frequently occur, would hasten or accelerate the evil which the poor man might have been striving to avoid. It is a well-known fact, more especially amongst engine-men, that these valves cease to act properly on some occasions, caused by a chip, or perchance a bit of hemp or cotton, which gets stuck between the valve and the seat, thus preventing the valve from shutting or closing. In the majority of cases this is discovered in time, and no ill consequences follow. The feed pump would even then supply the boiler with water until the steam pressure had increased above that of the adjoining boilers, which often happens after cleaning or repairs, before the steam is turned on. At this juncture the feed finds its way into the other boilers, unless the gimblet-valves of the said boilers are closed tight.

THE CLEVELAND IRON TRADE.—The iron trade in this district is now in a more active state than it has been for some few months past. The third furnace of the South Durham Company is again in blast, and between Eston and Consett there is not a single furnace out of blast, excepting those that are in an incomplete state. This, in a great degree, is to be attributed to the reduction of the rate of discount, and should the case of the money market continue to increase, no doubt we shall see a further extension of the efforts to increase the make of iron of all kinds that have been manifested in so remarkable a degree during the past eighteen months. The revival in the demand for pig-iron has affected the railway company materially, as the providers of the means of transit, and they are pressing urgently upon the makers of engines and wagons the importance of a manufacture, which, in the pressure of other work and the strike of Leeds considerably interrupted at first, but for the latter case, the North-Eastern Company would by this time have been in possession of some hundreds more wagons than they now have, and it is to be hoped that, as the difficulties are removed, the supply of railway plant of such importance to the district will be equal to the demand. There has been no interruption of any consequence at any of the ironworks, and they are all working steadily.

THE NEWPORT ROLLING-MILLS.—Under the management of Messrs. Fox, Head, and Co., iron manufacturers, some new works of great power and efficiency have been just established in the vicinity of Middlesbrough. They have been erected with a view, in the first instance, to the manufacture of ship and girder-plates only, and are of large capacity, comprehending two mills, one of them reversing, the other not, and separate forge with reversing rolls for making long and heavy puddle bars; separate rollers for cropping with engine attached to plate shears with 7½ blades and engine; boilers unconnected with the furnaces, and fed by separate donkeys. The works adjoin the Cumbria and Darlington Railway, and have river frontage on the Tees. Messrs. B. Samuelson and Co.'s furnaces are upon the adjoining land on the west. Middlesbrough is one mile distant and Stockton three. With these advantages for material and labour, it is easy to see that the manufacture can be carried on as cheaply as in any other locality in England, indeed cheaper than nine out of ten. There are three partners in the concern—Mr. Theodore Cox, late of the North-Eastern Iron Company, South Wales, and newly retired to the Messrs. Pease, of Durham; Mr. Jeremiah Head, formerly at the works of the late Robert Stephenson, at Newcastle-on-Tyne, and since upon his civil engineering staff; and Mr. Charles Newcomen, at present a minor, but belonging to a county family well known in the North of Yorkshire. The greater part of the works are now in full and successful operation. The machinery is of the most modern kind, and no expense or pains have been spared to make the place as perfect as possible. Half these puddling-furnaces and the hammer were started a fortnight since. Messrs. Fox, Head, and Co. are now starting a forge train, and will make deliveries of plates this week. Their brand will be F. H. and Company, the port-on-Tees, A or AA, or AAA, according to quality, and every effort will be made by them to represent the qualities truly, and to make them as uniform as possible.—*Esland's "Iron Trade Circular."*

SCIENCE MADE ATTRACTIVE.—The lectures of Prof. Pepper at the Royal Polytechnic Institution, on "Acoustics and Illusions of Sound," are proving quite as attractive as his ghost lectures, which illustrated illusions of sight. Acoustics may be defined the science of sound articulated as well as musical, and comprise the theories which exist with regard to our organs of speech, as well as to the auditory apparatus with which Nature has supplied man for the purpose of hearing. The lecturer, therefore, has the double task of describing the machinery by which we speak and sing, as well as the sensations by which the action of the voice is conveyed through the ear into the brain. He illustrates the two branches, which although so distinct are closely connected, by a series of novel and highly interesting experiments applicable to both, which must be seen in order to be understood. The result deducible from those experiments seems to be that the vibrations of the human voice are too complicated and too varied to be imitated by art, although machinery has been enabled to counterfeit the qualling of a child, or the barking of a dog. The piping flutes, which attracted such crowds at the Great Exhibition of 1862, are most ingenious specimens of mechanism, and the explanation given by Prof. Pepper of their mode of action excites universal applause. A speaking head is exhibited, the lips of which move as if addressing the audience, and although the sight may be deluded the professor shows that in this and similar cases the sound is conveyed from human lips, passing from a person concealed through tubes prepared and arranged for the purpose. A distinction has been taken between noise and sound; noise is defined to be the effect of sudden impulse on the ear, while the sensations of sound are supposed to be continuous, and illustrations of this distinction are presented to the spectators. Sound is invariably produced by vibrations in the air; the pulsations reach the eardrum apparatus which Nature has supplied for their reception. Physiologists may describe very accurately the anatomical appearance of the ear, but the theory of hearing is a mystery which philosophy has never yet solved, and probably never may. The modes by which sounds are conveyed in waves, when elucidated, as they are in these lectures, by scientific skill and the most perfect mechanical appliances, are both amusing and instructive, and few who have seen them once will fail to repeat their visits. The effect of their transmission on sounding boards, are matters which, besides exciting our surprise, afford interludes of delightful recreation. The most singular result produced was that which enabled us not only to hear, but actually to see in a mirror the effect of accordant musical notes when in unison with each other, the derangement of the notes to the ear producing similar derangement in the spectacle to the eye. Whenever remembrance

to have passed our time more agreeably than in listening to and witnessing the entertainment which the Polytechnic Institution has in these lectures provided for its numerous visitors.

THE LIFE OF ROBERT STEPHENSON.*

Although comparatively few amongst the large number of railway travellers give themselves much trouble to consider to whom they are indebted for the important advantages of railway communication, it would be difficult to find anyone who is unacquainted with the fact that both GEORGE STEPHENSON and his son ROBERT were intimately connected with railways in their early infancy, and contributed much to secure their success. As in the case of all who have added largely to the benefits of mankind, the life of the Stephensons has been much mixed up with fiction, with a view to show that the natural merits of the men were apparent from their cradle upwards, and thus it is that many laughable anecdotes have been connected with biographies, which would be more truthful, and quite as interesting, without them. The Life of Robert Stephenson, by Messrs. Jeaffreson and Pole, which has just been issued, displays not only an immense amount of careful research, but a large amount of judgment and discrimination in separating the facts from the fictions. Mr. Jeaffreson has, no doubt, been fortunate in obtaining the assistance of many whose intimate connection with the Stephensons enable them to supply information of the most reliable character, and he has given ample evidence that he well knew how to make use of the advantages thus possessed to produce a thoroughly readable, yet truthful, biography.

After a special and lengthened visit to Northumberland and Durham, where oral communications from Robert Stephenson's numerous relations enabled pretty accurate conclusions to be arrived at as to the best sources of information worthy of consideration, the parish registers, as well as the account books of collieries and factories, were referred to, in order that no doubt might exist as to the principal landmarks of the book, and upon the author's return from the North of England he proceeded to collect documentary materials in every direction, until he had brought together a mass of evidence, the existence of which even the representatives of Robert Stephenson were not aware of. Thus, he is enabled to tell us that, besides letters submitted to his perusal by a great number of the engineer's friends, and besides papers sent to him by his executors, he obtained the custody of several important collections of documents. Mr. Longridge put into his hands the Stephenson papers which his father had preserved. Mr. Illingworth allowed him to peruse his South American papers. Mr. Charles Emson shortly before his death contributed to his store of materials a most interesting collection of letters and documents, consisting of Robert Stephenson's early journals, and of nearly all the letters which he either received from or had written to friends or relations between the termination of his life on Killingworth Moor and his return from South America. Assistance has also been rendered to him by Messrs. G. P. Bidder, Charles Manby, and G. R. Stephenson, as well as by the late Messrs. Losh and Weallens, of Newcastle; Kell, of Gateshead; Admiral Moorsom, and Chas. Parker. The chapters descriptive of the more important professional works of Robert Stephenson have been undertaken by Mr. Wm. Pole, and the admirable manner in which the task has been accomplished reflects the highest credit upon the author, and is, at the same time, well calculated to impress the great merits of the engineer more indelibly upon the mind of the reader.

The history of the Stephenson family is carefully traced in the first chapter of the book, which contains also the account of the birth and christening of Robert, the subject of the biography, and we have then the history of his early life until he arrived at the age of nine years, whilst the subsequent chapter carries him through the period of the schoolboy, his apprenticeship to Mr. Nicholas Wood being detailed in the fourth chapter. Here we find an important reference to one of the earlier improvements in tubular boilers, which appears to be given in a thoroughly fair and impartial spirit. The time under consideration is 1820 and 1821, and Mr. Jeaffreson observes that another incident of importance marks this period of George Stephenson's career. Anxious to improve the locomotive, for which he and Mr. Losh had taken out letters patent, George and his co-patentee resolved to introduce into their boilers the tubes recommended by Messrs. William James and William Henry James, giving those gentlemen a share in their patent rights, in return for the permission granted them "to adopt any improvements, and the introduction of tubes to their boilers, as contained in the letters patent to William Henry James, son of the said William James, as granted to him in the reign of his present Majesty." The agreement between Losh and Stephenson on the one part, and the James's on the other, bears date Sept. 1, 1821. These tubes must not, however, be confounded with the multitubular boiler, which ultimately decided the triumph of the locomotive. Almost countless unsuccessful experiments were made before Mr. Henry Booth (with the concurrence of the Stephensons) produced his beautiful arrangement. The agreement of Sept. 1, 1821, is of interest, as it gives a date when George Stephenson was intent upon increasing the heating surface of his boilers by the introduction of tubes, and also preserves the reputation of two other inventors whose services to the locomotive ought not to be forgotten, although they have been exaggerated by indiscreet friends.

Robert Stephenson's apprenticeship had not expired when he made a trial of a safer, but not less laborious, occupation. George Stephenson having been appointed by Edward Pease, engineer-in-chief of the Stockton and Darlington Railway, at a salary of 300*l.* per annum. Robert, then just 18 years old, accompanied him, and assisted him in making the survey of 1821. The survey being completed, Robert Stephenson's name was put upon it as the engineer, and at George's particular direction no mention was made of himself. The consequence was that Robert had to make his second visit to London—this time not for pleasure, but to be examined by a parliamentary committee on an affair of great commercial importance. Before making his first public appearance as engineer of the Stockton and Darlington Railway, Robert Stephenson resided for a few months in the University of Edinburgh—in all something less than six months. This permission was accorded by his father in 1822, and forthwith Robert Stephenson started for the Scotch capital. As the date of his residence has been misstated, so also has the importance of it been exaggerated. To call it by the imposing title of a "university education" would be to mislead the reader. It has been erroneously stated that Robert Stephenson bore off at Edinburgh "most of the prizes of the year." The fact is, he did not gain a single university prize, but gained a prize (in the shape of a book given by Prof. Leslie) in the Natural Philosophy class, in recognition of the ability displayed in answering certain mathematical questions in the regular weekly examination papers.

The connection of the Stephensons with the Stockton and Darlington Railway enabled George Stephenson to induce Edward Pease, Thomas Richardson, and Mr. Longridge, to join him in establishing the now well-known factory of "Robert Stephenson and Co.," and this Thomas Richardson, being the founder of the famous discount house of Richardson, Overend, and Gurney, and one of the most sanguine projectors of the Colombian (now Mariquita) Mining Association, led to Robert Stephenson's visit to South America. Previous to his journey he had great difficulties in arranging the terms of his appointment, and after all sailed from England as the agent of the promoters of the undertaking, in their individual capacity, although he was to preside over the engineering affairs of the association. At the Santa Ana and La Manta Mines he again met with great difficulties, owing to the obstinacy and excessive drunkenness of the miners, and although his position was made known by the agents at Bogota, in such a manner that the miners felt it their duty to obey his orders, he seems to have been subjected throughout to many vexations. His biographer observes, that the longer he remained in South America the more painful was his position. A very brief acquaintance with the country satisfied him "that he was at the head of an enterprise projected by visionary speculators, who had no real knowledge of its difficulties." Upon leaving the mines Robert Stephenson proceeded to New York, and visited the Falls of Niagara and Canada previously to his return to England, arriving in London on the last Thursday in December, 1827.

By this time Robert Stephenson had arrived at the age of nearly 25, and we now obtain a very interesting narrative of his perseverance and failures, until he succeeded in rendering Booth's multitubular boiler of practical value, and producing a locomotive which surpassed all competitors, by attaining the extraordinary speed of twelve miles an hour. This portion of his life is also of importance, as comprising the period of his courtship and marriage on June 17, 1829, to Miss Fanny Sanderson.

In the succeeding chapter we have a very graphic account of the opening of the Liverpool and Manchester Railway, whilst the next, which carries Robert Stephenson to the age of 34, gives the history of the construction and opening of the London and Birmingham Railway. The account

of Stephenson's Stanhope and Tyne difficulties, and the manner in which those difficulties were overcome, are the next portions of the work which claim attention, and we have then the melancholy record of the death of his wife, which occurred on October 4, 1842. The progress of railway development, including the trial and failure of the atmospheric system of propulsion, is carefully recorded, and his various achievements in England, Wales, Canada, and elsewhere, are described, until his services in Norway secured him the honour of the decoration of the Olaf Cross. Here his labours were to end. At the banquet given in his honour at Christiania, on the occasion of the opening of the Norwegian Railway, he made his last speech in public, and here, as on every other occasion, he took especial care not to accept for himself honours which the merits of others had gained. He brought the names of Consul-General Crowe and Mr. Bidder prominently forward, as entitled to as much credit as himself, and expressing the desire once to come back to see the results, concluded by wishing prosperity and happiness to Christiania. On the following morning his health, which had been gradually declining, became worse, and by night he felt that, unless he made good speed, he would, probably, die away from his native country. He, however, reached England, and for a time appeared to revive, but it was only a very temporary improvement; and on October 12, 1859, Robert Stephenson breathed his last. His body received the highest honour accorded to Englishmen—sequestration in Westminster Abbey. Her Majesty, "to show that she fully shared with the public in lamenting the loss which the country had sustained by his death," granted especial permission for the cortege to pass through Hyde-park on its way to the Abbey.

The entire work is one, every page of which will be read with general interest, not only by engineers, to whom the life affords a noble example of diligent perseverance and steady honesty of purpose, but also by everyone who is able to appreciate the advantage which the railway system has conferred upon the country, whilst the reading of it cannot fail to produce the strongest impression that the authors have given especial attention that facts only shall be stated by them, whatever may be the advantage of the humorous anecdotal style which has been adopted by others.

THE EAST BOTTLACK CONSOLIDATED MINING COMPANY (Limited).—The petition presented to the Master of the Rolls for winding-up this company was heard on the 12th inst. Mr. Brooksbank, instructed by Mr. Palbrook, stated no notice of opposition had been given. It was alleged in the petition that an execution against the company had been returned unsatisfied; therefore the petitioner's right to present the petition accrued. The company had been registered with the Registrar of the Stannaries, but it had never been engaged in mining, therefore the Court of Chancery was the court having jurisdiction in the matter. The Master of the Rolls made the order. Subsequently, Mr. Jessel stated he had been instructed to oppose the petition, as some of the directors were unaware that a judgment had been obtained; and he should ask that the matter stand over until the petition-day after term, that enquiries might be made respecting the claim, and, if found correct, there would be notice of any proceedings, as the money would be paid. Mr. Brooksbank assented. This is the first petition presented to the Court of Chancery to wind-up Cornish mines since the passing of the Companies Act, 1862.

STANNARIES COURT.—The quarterly sitting of the Stannaries Court was commenced on Wednesday last, at Truro, before the Vice-Warden, E. Smirke, Esq. Motions in the following cases were made:—By Mr. Stokes and Mr. Roccoria, in Alfred Consois Mine, a winding-up petition; by Mr. Marrack, in Paul v. Richmond, Wheel Hartley—a pursuer's suit; by Mr. Marrack, in Green v. Hoyle, Buller and Basset United Mine—motion for sale of shares; by Mr. Roberts and Mr. Paul, in the case of the suit instituted against the directors of Great North Toluus Mining Company; and by Mr. Marrack, in the case of Hammett Consois Mine, near Liskeard—a winding-up petition. The Court made an order in each case.

FENCING SHAFTS.—In the Court of Exchequer, the case "Cooke v. Mostyn" raised the question as to the liability of the owners of mines to fence round the openings of their shafts, so as to guard against persons walking on the surface of the soil falling down the shafts. The declaration stated that the defendants were the owners of a lead mine with an open shaft unprotected by any fence; that the surface of the soil belonged to another person; and that in consequence of the want of fencing the plaintiff, who was lawfully on the land, fell down the shaft and was injured. The defendants pleaded many pleas, and there were cross demurrers to the pleas and declaration. The real question in dispute was whether the defendants, as owners of the mine, were bound as against the plaintiff to fence the shaft, and therefore liable for the injury he had sustained through their not having done so. Mr. Bovill, Q.C., argued for the plaintiff, and Mr. Milward was proceeding to argue on behalf of the defendants, when the Court interposed, saying that the issues of fact had better be tried and disposed of before the demurrers were argued.

LIABILITY AS CONTRIBUTORIES.—The Lord Chancellor decided, in *re* Mosses Green Coal and Coke Company, that if a person has consented that his name be entered as a shareholder in a company in respect of shares not fully paid-up, though on a contract, known to the directors, that he shall incur no liability, he remains liable as a contributory until his shares are legally transferred; and if before such transfer the company be wound-up, he must be placed on the list of contributories, and has no right to require the share register to be amended by substituting the name of the true owner.

ELFORD, WILLIAMS, AND CO.
COPPER ORE WHARFINGERS,
METAL AND GENERAL COMMISSION AGENTS,
SWANSEA.

TO THE SHAREHOLDERS OF THE BRYN GWIG, LONG RAKE, AND BILLINS MINES.
Sirs,—The melancholy death of Mr. Dunsford, our late esteemed secretary, has caused a vacancy in the London management of the above mines. As I have been largely interested from the commencement, and spent much valuable time in assisting in laying out, and in the general management to bring them to their present state of productive-ness, and in all probability their future profitable one, has induced me to offer myself for the vacant office of secretary. As I have always filled the office of pursuer in the above mines, and am well acquainted with the details of the secretarialship, I could with little extra expense (and for much less than if done separately) combined and fill both offices, at the same time render my usual assistance to the local manager in all future operations. Should you approve of my application, you will oblige by retaining for me your vote and influence, or send me your proxies for the forthcoming meetings. I am, your obedient servant,
WM. MICHELL.
42, Cornhill, London, Nov. 18, 1864.

EAST WHEAL VOR COMPANY.—At a MEETING of the committee, on Nov. 11, 1864, the following resolutions were passed:—In consequence of the death of Mr. W. J. Dunsford, application be made to his representatives for all books, leases, papers, &c.; that Mr. WILLIAM WATSON be appointed the pursuer of the mine; and that when the books, leases, papers, &c., are obtained the same be handed over to him.—Nov. 18, 1864. WILLIAM WATSON, Pursuer, Calstock, Cornwall.

WHEAL GRYLLS COMPANY.—At a MEETING of the committee, on Nov. 11, 1864, the following resolutions were passed:—In consequence of the death of Mr. W. J. Dunsford, application be made to his representatives for all books, leases, papers, &c.; that when the books, &c., are obtained the committee hand same over to the pursuer.
Nov. 18, 1864. WILLIAM WATSON, Pursuer, Calstock, Cornwall.

GREAT WHEAL GRYLLS COMPANY.—At a MEETING of the committee, on Nov. 11, 1864, the following resolutions were passed:—In consequence of the death of Mr. W. J. Dunsford, application be made to his representatives for all books, leases, papers, &c.; that when the books, &c., are obtained the committee hand the same over to the pursuer.
Nov. 18, 1864. WILLIAM WATSON, Pursuer, Calstock, Cornwall.

WHEAL ARTHUR COMPANY.—At a MEETING of the committee, on Nov. 11, 1864, the following resolutions were passed:—In consequence of the death of Mr. W. J. Dunsford, application be made to his representatives for all books, leases, papers, &c.; that when the books, &c., are obtained the committee hand the same over to the pursuer.
Nov. 18, 1864. WILLIAM WATSON, Pursuer, Calstock, Cornwall.

JOHN B. REYNOLDS, STOCK AND SHAREBROKER,
2, HATTON COURT, THREADNEEDLE STREET, LONDON, E.C., executes orders promptly. SPECIAL BUSINESS in East Lovell.

"I never get anything by mining transactions, and therefore I decline making any further purchases." Such is the answer received very often by brokers who, in periods of depression, like the present, urge their clients to invest in mines. There are those, however, who eagerly seize at an opportunity like this to make a careful selection, and buy as largely as their means will justify them in doing, and such are the parties who make money in these securities without difficulty. Seasons of inactivity are, of course, followed by a reaction, and when this sets in the prudent speculator is in a position to realise advantageously, whilst the unfortunate one, "who never gets anything by mining transactions," is without stock, having sold at the lowest quotations.

There are some mines of capital standing that are making very considerable returns, but have suffered severely from the terrible depression in the metal market, and which will most assuredly have a remarkable rebound when metals advance in price, or a good discovery takes place in the properties. To such investments I would call the immediate attention of capitalists, not excepting those who are adverse to speculation, believing, as I do, if ever there was a time when money could be put in certain mines without risk it is now. I am not amongst the number of those who think that good times are far in the distance, for there are already symptoms of coming prosperity. Quietly—very—are good shares being bought and stored away. Judicious business men are already in the field. By taking care of themselves they are helping to turn the tide, and who does not wish them every success?

During the many years I have been connected with the Mining Exchange I have kept a list of mines which I have considered good for investment and speculation, and I always endeavour to recollect that the interest of the broker is thoroughly bound up in that of his client. When the agent is successful in his selection he reaps a benefit with his customer, and *vice versa*. Bearing this in mind, it behoves the broker to be very cautious; but it is a duty equally binding on the investor to satisfy himself, as far as possible, as to the soundness of his broker's views, and if a good understanding exists between the employer and the employed success may be fairly anticipated.

Let all concerned in mining remember, for their encouragement, that one successful hit amply makes up for very many disappointments, and that losses are very often incurred through want of proper forethought. In the coming seasons of prosperity it is to be hoped that, whilst wild speculators will be avoided, the attention of large capitalists will be drawn to this wide, and ever-widening, field of industry, which offers so many advantages.—November 18, 1864.

India Office.

BY ORDER OF THE SECRETARY OF STATE FOR INDIA
IN COUNCIL, notice is hereby given that the DIRECTOR-GENERAL OF STORES FOR INDIA will be READY, on or before MONDAY, the 21st instant, to RECEIVE PROPOSALS in writing, sealed up, from such persons as may be willing to supply—
SLIP COPPER.
And that the conditions of the said contract may be had on application at the India Store Office, Cannon-row, Westminster, where the proposals are to be left any time before Two o'clock P.M. of the said 21st day of November, 1864, after which hour no tender will be received.
Gerald C. Talbot, Director-General.
India Office, November 14, 1864.

METALLURGICAL AGENCY FOR FRANCE.—The TRAVELLER for the PONT-A-MOUSSEON FOUNDRIES and IRONWORKS DESIRES an ENGAGEMENT CONNECTED with METALLURGY IN ENGLAND, or the REPRESENTATION in FRANCE of an ENGLISH HOUSE specially occupied in the PIG and WROUGHT IRON TRADE. Unexceptionable references.—Address, Mr. IMBERT, Forges de Pont-A-Mousseon (Meurthe), France.

IRON AND OTHER METAL TRADES.—WANTED,
A GENTLEMAN to ASSIST in the MANAGEMENT of the LONDON HOUSE of a LARGE MANUFACTURING FIRM. Anyone having a connection among railway contractors, engineers, and metal workers and shippers would be preferred. Minimum salary, £300 per annum.—Name, age, past occupation, and full particulars to "W. K.," 8, Birchinn-lane, London, E.C.

WANTED, by a young gentleman, for the last five years MINING CLERK, a similar ENGAGEMENT. First-class references if required.—Address, "W. R.," Mining Journal office, 26, Fleet-street, London, E.C.

TO COMPANIES.—THE ADVERTISER, having good offices in the best part of Cornhill, is PREPARED to UNDERTAKE the SECRETARYSHIP of COMPANIES, with use of board room, on moderate terms. References given.—Apply by letter only, to "W. W.," Messrs. Hooper and Cull, No. 12, George-street, Mansion House, E.C.

TO MINING AGENTS AND OTHERS.—THE ADVERTISER, having discovered a VALUABLE LEAD and COPPER MINE, WISHES to MEET with a GENTLEMAN who will FIND the PRELIMINARY EXPENSES for SECURING the SAME.—Specimens can be seen at Mr. C. ASKEW'S, 27½, Charles-street, Hampstead-road, N.W.

TO CAPITALISTS.—THE LESSEE of a FIRST-RATE COLLIERY in NORTH WALES WANTS a PARTNER, with about £2000. A mining engineer or practical colliery manager might have the management. A profit of 4*s.* per ton can be clearly shown on the coal raised in the royalty, which is an extensive one.—Address, "Bryn," care of Mr. H. Greenwood, advertising agent, Liverpool.

A PRACTICAL MINING and MECHANICAL ENGINEER, of 25 years' experience at home and foreign, and who speaks Spanish and Italian fluently, is DESIROUS of an ENGAGEMENT, at home or abroad; or would UNDERTAKE the SURVEY and INSPECTION of ANY MINING PROPERTY in any part of the world.—Address, "B.," Mining Journal office, 26, Fleet-street, London, E.C.

TO INVENTORS and PATENTEES.—A GENTLEMAN having an extensive connection with manufacturers, merchants, and others, would be GLAD to UNDERTAKE the SALE of INVENTIONS or PATENTED ARTICLES, on commission.—Apply to Mr. RAWLE, patent office, 14, Clare-street, Bristol. N.B.—Continental and foreign agencies solicited.

TO BE SOLD, from ONE to FOUR (96ths) SHARES in the SOUTH PANT-Y-GOF MINING COMPANY (LIMITED), HALKYN, HOLYWELL, FLINTSHIRE.—Apply to Mr. THOMAS EATON, Aldford, Chester, the proprietor; or to Capt. JONES, at the mine.

NORTH LAXEY MINE.—The Liquidators of the North Laxey Mining Company (Limited) are PREPARED to RECEIVE TENDERS for the PURCHASE of this MINE, together with the LEASE and PLANT. The grant, or set, adjoins that of the celebrated Great Laxey Mine, in the Isle of Man. The tenders to be delivered at Mr. Munro's office, 8, Austinfriars, London, by Twelve o'clock on Monday, the 21st inst. The conditions, and an inventory of the plant, &c., can be inspected at the same address.—November 8, 1864.

WHEAL ANNA, ST. HILARY, NEAR MARAZION, CORNWALL.
FOR SALE, BY PRIVATE CONTRACT, the WHEAL ANNA MINE, with the MATERIALS thereon, situate in the parish of St. Hilary, near Marazion, Cornwall, adjoining the Great Wheel Prosper Mines.

The materials consist of a 70 in. cylinder PUMPING ENGINE, with THREE BOILERS complete.
36 in. cylinder PUMPING ENGINE, with ONE BOILER.
32 in. DOUBLE STAMPING ENGINE, 9 ft. stroke, with ONE BOILER, and 36 heads of stamps.

22 in. WINDING ENGINE, with BOILER and cage.
Capstans, shears, balance-bobs, capstan rope, a large number of 17 in., 16 in., and 12 in. pumps, with windrobs, doorpieces, H. pieces, plunger poles, working barrels, rods, rod plates, caps, shaft roller, rod and flange bolts, rail iron, chains, ladders, whims, &c.; Brenton's calciner, with tin frames, trunks, buddies, &c.; smiths' and miners' tools, &c. To view the same, apply to the agents, on the mine; and for further particulars to Mr. J. P. BENNETT, Falmouth; or to Messrs. JOHN TAYLOR and SONS, 6, Queen-street-place, Upper Thames-street, London.—Nov. 1, 1864.

FOR SALE, a POWERFUL CORNISH CRUSHER, with 28 inch rolls, with back gear and raft wheel, all in excellent condition, and may be seen at Crowndale Mine, near Tavistock.—Information can be had by applying to Mr. THOS. NICHOLLS, Abbey Mead, Tavistock.

FOR SALE, the RIGHT to the PATENT of a VALUABLE IMPROVEMENT in VALVES and BUCKETS for PUMPS, and in VALVES or COCKS for OTHER USES.—For particulars, apply to Mr. W. T. RAWLE, patent and mining agent, 39, Budge-street, Bristol.

MERIONETHSHIRE, NORTH WALES.

TO BE DISPOSED OF, a SLATE QUARRY PROPERTY, vein proved, and position commanding all advantages. Also, a VALUABLE GRANT, possessing a RICH SILVER-LEAD MINE, with other lodes, very favourable.—To treat for the same, apply to Mr. H. P. M. OWEN, C.E., Penrhynendendrach, via Carnarvon.
MR. OWEN has OTHER MINES and QUARRIES TO DISPOSE OF. Also, begs to offer his services to gentlemen in all inspections of native mineral, with practical reports thereon. Immediate attention given.

TO COLLIERY PROPRIETORS.—TO BE SOLD, BY PRIVATE CONTRACT, ONE 25 in. cylinder CONDENSING BEAM ENGINE, 5 ft. stroke, with fly-wheel 14 ft. diameter, jack head and feed pump 6 ft. diameter, winding drum for flat rope, 2 pump cranks for 5 ft. stroke, with TWO wrought-iron CYLINDRICAL BOILERS 24 in. long, 6 ft. diameter, with steam pipes and fittings; the above in good order, and suitable for pumping and winding. Also, ONE DIRECT ACTING PUMPING ENGINE, 45 in. cylinder, 9 ft. stroke, with tallie piston, double beat valves and connections; ONE wrought-iron CYLINDRICAL BOILER, 29 ft. long, 6 ft. diameter, in excellent working order.—To view and treat for the same, apply to Mr. HALLS, Broncoed Colliery, Mold, Flintshire.

TO SPECULATORS and CAPITALISTS.—TO BE LET, ON LEASE, the BEAMS of COAL lying UNDER ONE HUNDRED and TWENTY ACRES of LAND in WARWICKSHIRE; and also therewith an OLD ESTABLISHED TILERY and BRICK YARD, situated thereon, where there is an inexhaustible BED of FIRST QUALITY BLUE or IRON BRICK CLAY, adjoining to a main line of railway, to which a siding has been attached. The tilery and brick yard may be taken on lease apart from the coal set, and the coal would be let on a separate lease.—For particulars, apply by letter only, 339, Herald office, Birmingham.

WIRE ROPES FOR SALE, BY PRIVATE CONTRACT.—ONE WIRE ROPE, 196 fms. long; EIGHT ditto, each 183 fms. long; and TWO ditto, each 116 fms. long; all 4½ in. circumference, weighing 22 lbs. per fm., and made of the best charcoal iron wire, by Messrs. Glass, Elliott, and Co.—Applications to be addressed Messrs. COCHRANE, GROVE, and Co., Clifton Suspension Bridge Works, Bristol, where every information can be obtained.

ALTEN and QUENANGEN MINING COMPANY (LIMITED).—Notice is hereby given, that the ANNUAL GENERAL MEETING of the shareholders will be HELD at the office of the company, No. 2, New Broad-street, on WEDNESDAY, the 30th day of November inst., at Two o'clock precisely, for the purpose of receiving a report from the directors, and statement of accounts to 31st March last.
By order of the Board, EDWARD J. COLE, Sec.
2, New Broad-street, London, E.C., November 18, 1864.

ISAAC FRANCIS, NANT, WREXHAM, a dresser of 30 years' experience, is OPEN to INSPECT ANY DRESSING PLACE on moderate terms. Mr. FRANCIS can introduce PLANS of IMPROVEMENTS that will SAVE THIRTY PER CENT. COST in certain departments of any dressing floors.

MR. JOHN BATTERS, STOCK AND MINING SHAREBROKER, 13, THROGMORTON STREET, LONDON, E.C., pays particular attention to British Lead, Copper, and Tin Mines, for which he solicits orders to sell or buy, at net prices.

MESSRS. HARVEY AND CO., MINING ENGINEERS, AGENTS, AND SHAREDEALERS, CLARENCE CHAMBERS, MANCHESTER, are at all times in a position to deal in all the market Dividend and Progressive Mine shares, and also to advise on all mining matters, being practically acquainted with the business, and having a daily communication from the mining districts of Devon and Cornwall.
Messrs. HARVEY and Co. publish a monthly "Mining Circular," containing a valuable summary of mining information. Forwarded gratis on application.
The Circular for November contains a report on Kelly Bray, West Stray Park, and South Cardon Wheel Hooper.

MESSRS. ROBERTS AND CO., 87, LONDON WALL, E.C., have selected a LIST of DIVIDEND and PROGRESSIVE MINES, which they can strongly recommend. Also, Bank, Railway, and other shares.
Commission, 1½ per cent.
Office of ROBERTS and Co.'s "Price List, and Stock and Share Reporter," price 3*d.*

MESSRS. ROBERTS AND CO.'S PRICE LIST AND STOCK AND SHARE REPORTER contains Reports of Mines, Notices of Meetings, Plans of Mining Districts (showing the position of progressive mines in reference to those returning large profits), Railway Meetings, Joint-Stock Companies Intelligence and Advice as to the Purchase and Sale of Stock.—87, London-wall, E.C.

* "The Life of Robert Stephenson, F.R.S.," &c. By J. C. JEAFFRESON, barrister-at-law. With Descriptive Chapters on some of his most important Professional Works. By WILLIAM POLE, F.R.S. Two volumes. London: Longmans.

THE NORWEGIAN TITANIC IRON COMPANY (LIMITED).

The above company beg to CALL THE ATTENTION OF IRONMASTERS AND STEEL MANUFACTURERS to the IMPORTANT RESULTS that are to be obtained by the USE OF THEIR IRONS IN AD MIXTURE WITH ORDINARY IRON ORES.

It has been proved by the experience of ironmasters, extending over a considerable time, that even a small proportion of the Norwegian ore has a most beneficial effect on the quality of the pig, and that it increases its strength considerably, the pig when puddled making iron of a very superior quality, and of a tenacious nature.

The above ores when mixed with the hematite make a pig specially adapted for the Bessemer process.

The great utility of these ores for smelting has been fully established at several of the large ironworks in the North of England; they are far more durable than ball dog, magnetic oxide of iron, red ore, calcined ironstone, or any other material that has hitherto been introduced. Besides the peculiar property the Norwegian ores have of resisting great heat and fluxing action, they materially improve the quality of puddled bar.

The directors having purchased extensive deposits of the ore in Norway, and constructed a railway to facilitate its regular supply, are now preparing to import it on a large scale.

The ore can be supplied with varying proportions of iron and titanium, some containing 54 per cent. of metallic iron, and 10 to 12 per cent. of metallic titanium, others containing less iron and more titanium.

The great feature in these ores is the entire freedom from the impurities found in ordinary iron ores—viz., sulphur, phosphorus, &c., and from their containing the metals titanium and vanadium, which are found in Swedish and Russian irons of the best brands; they are peculiarly fitted for the manufacture of superior descriptions of iron and steel, and for improving the quality of inferior brands.

Applications to be made at the office of the company, 4, Park-place, Leeds.

BEST CRYSTALLISED MANGANESE SPIEGEL IRON

AND ALL OTHER KINDS OF GERMAN NATURAL STEEL IRON.

Produced out of the best sparry iron ore, for steel manufacturing works, as well as for puddling, forging, and foundry, ironworks, to refine common iron, delivered to all parts of Great Britain, and all information given by RUDOLPH BEUTEFUEHR, Iron Merchant and Mining Agent, SIEGEN (Rhinisch Prussia).

P.S.—Railway trains to and from the Rhine, via station Duis (opposite Cologne).

Smithfield Club Cattle Show, 1864.

(IN THE GALLERY.)

HENRY CLAYTON AND CO., of the ATLAS WORKS, will exhibit some SPECIMENS of their IMPROVED PATENT BRICK MAKING MACHINES, COMBINING CRUSHING, PUGGING, and MOULDING. BRICK and TILE PRESSING MACHINES. COMBINED MOULDING and PRESSING MACHINE for FIRE-BRICKS. TILE and PIPE MAKING MACHINES. NEW PATENT TILING MACHINERY. PORTABLE MORTAR MILLS. PATENT PNEUMATIC SYSTEM for DRYING BRICKS and TILES. Catalogues free by post, on application at their new manufactory, Woodfield-road, Harrow-road, London, W. (late of Upper Park-place, Dorset-square).

Gun Cotton Manufactory.

MESSRS. THOMAS PRENTICE AND CO., GREAT EASTERN CHEMICAL WORKS, STOWMARKET, SUFFOLK. This manufactory has been established for the purpose of preparing GUN COTTON, according to the Austrian process, and was opened on the 26th of January last, under the inspection of Baron Lenk. Messrs. Thomas Prentice and Co. are now able to SUPPLY GUN COTTON, in its most approved form, either for the purposes of engineering and mining, or for military and submarine explosion, and for the service of artillery, as a substitute for gunpowder.

The advantages of Baron Lenk's GUN COTTON are the following:—
For PURPOSES OF ARTILLERY.—The same initial velocity of the projectile can be obtained by a charge of gun cotton one-fourth of the weight of gunpowder. There is no smoke from the explosion of gun cotton; it does not foul the gun, nor heat it to the injurious degree of gunpowder. There is much smaller recoil of the gun. The same initial velocity of projectile is produced, with a shorter length of barrel. In projectiles of the nature of explosive shells it breaks the shell more equally into much more numerous pieces than gunpowder. When used in shells, one-third the weight of gun cotton produces double the explosive force of gunpowder.

For CIVIL ENGINEERING AND MINING.—In driving tunnels through hard rock a charge of gun cotton of given size exerts double the explosive force of gunpowder, thus a smaller number of holes is necessary. It may be so used as, in its explosion, to reduce the rock to much smaller pieces than gunpowder, and so facilitate its removal. As gun cotton produces no smoke, the work can proceed much more rapidly, and with less injury to the health of the miners. In working coal mines the advantages of bringing down much larger quantities of material with a given charge, and the absence of smoke in the explosion, enable a much greater quantity of work to be done in a given time at a given cost. The weight of gun cotton required to produce a given effect in mining is only one-sixth part of the weight of gunpowder. In blasting rock under water the wider range and greater force of a given charge is a great element in cheapening the cost of submarine work. The peculiar local action of gun cotton, to which the effects of gunpowder show no analogy, enables the engineer to destroy and remove submarine stones and rocks, without the preliminary delay and expense of boring chambers for the charge.

For MILITARY ENGINEERING.—The facility of transport is increased, the weight of gun cotton being one-sixth that of gunpowder. The peculiar local action of gun cotton facilitates the destruction of railways, bridges, and every obstacle. For submarine explosion, gun cotton has the advantage of a much wider range of destructive power than gunpowder. For the same purpose gun cotton, from its lightness, has the advantage of keeping afloat the water-tight case in which it is contained, while gunpowder sinks it to the bottom.

For NAVAL WARFARE.—In the batteries of ships, between decks, and in casemated forts, the absence of smoke facilitates continuous rapid firing. The absence of fouling and of heating are equally advantageous for naval as for military artillery.

GENERAL ADVANTAGES.—Time, damp, and exposure do not alter the qualities of the patent gun cotton. It has already been preserved 10 years without injury or decay. It can be transported through fire without danger, simply by being wetted, and when dried in the open air it becomes as good as before. In the case of a ship, or a fortress, or a city being on fire, this quality may be of the greatest value. It is much safer than gunpowder, owing to its being manufactured in the shape of rope or yarn. It cannot escape from its package, or be ignited by accident. The patent gun cotton is entirely free from the danger of spontaneous combustion, and secures that degree of safety and certainty which, at the time of the original invention, the gun cotton of Schönböhm did not possess.

Messrs. THOMAS PRENTICE and Co. are now in a position to contract with the owners of mines, engineers, contractors, and governments for gun cotton prepared in the various forms required for their use. Mining charges will be supplied in the rope form, according to the diameters of bore required, and gun cotton match-line, as well as instructions for using it in mines, will be supplied with it.

The great advantage of gun cotton make its use in practice very much cheaper than its comparative price would appear to show; in blasting rock, for example, the rapidity and quantity of the work done, with a given expense of wages, &c., is largely in favour of gun cotton.

Messrs. THOMAS PRENTICE and Co. are also prepared to manufacture the gun cotton, and deliver it in the form of gun cartridges, adapted to every description of ammunition; all they require for this purpose being a drawing of the gun, gunpowder cartridges, and ammunition, with the specification of weights, sizes, and initial velocities.

Artillerists who prefer to manufacture their own cartridges may make special arrangements with the patentees through Messrs. PRENTICE and Co.

Stowmarket, March 10 1864.

Now ready, second edition, with numerous woodcuts, post 8vo., 9s. cloth (postage 8d.).

THE COMMERCIAL HANDBOOK OF CHEMICAL ANALYSIS.

Or Practical Instructions for the Determination of the Intrinsic or Commercial Value of Substances Used in Manufactures, in Trades, and in the Arts.
By A. NORMANDY, Author of "The Chemical Atlas," &c.
We recommend this book to the careful perusal of everyone; it may be truly affirmed to be of universal interest, and we strongly recommend it to our readers as a guide, and indispensable to the housewife as to the pharmaceutical practitioner.—*Medical Times.*
The author has produced a volume of surpassing interest, in which he describes the character and properties of 400 different articles of commerce, the substances by which they are too frequently adulterated, and the means of their detection.—*Mining Journal.*
London: Lockwood and Co., 7, Stationers' Hall-court.

Just published, small 4to., sewed, price 1s.

ON THE STEAM GENERATING POWER OF MARINE AND LOCOMOTIVE ENGINES.

By CHARLES WYE WILLIAMS, Assoc. Inst. C.E., Assoc. Inst. N.A., Author of the "Combustion of Coal Chemically and Practically Considered."
London: E. and F. N. Spon, 16, Bucklersbury.

Now ready, price 2s. 6d., by post 3d. penny stamps.

MR. HOPKINS'S NEW WORK, entitled CONVERSATIONS ON MINES, &c., BETWEEN "A FATHER AND SON." Thirteen plans on ventilation and working out coal, dialling, planning, and taking the dip and rise of the mine illustrated.

Near 900 copies are ordered in Wigan alone.
Address Mr. J. J. CAMPBELL, Cropper's-hill, St. Helen's; or the author, 73, Peter-street, St. Helen's.

MR. BRENTON SYMONS INSPECTS and REPORTS on ANY MINERAL PROPERTY. In all cases where procurable a plan will accompany his report.—18, Hatton-garden, E.C.

THE BANKING, MINING, AND JOINT-STOCK COMPANIES REVIEW, A JOURNAL OF COMMERCE, TRADE AND MANUFACTURE, SCIENCE AND THE ARTS.

Published every Wednesday. Subscription, £1 1s. annually. Price 6d. stamped.

RAILWAYS AND MINES.

Capitalists whose safe and profitable investments, free from risk, should act only upon the soundest information. The market prices for the day are for the most part governed by the immediate supply and demand, and the operations of speculators, without reference to the bona fide merits of the property. Railways depend upon the traffic, expenditure, and capital accounts, the probabilities of alliance or competition with neighbouring companies, the creation of new shares, the state of the money market as affecting the renewal of debentures, and other considerations founded on data to which those only can have access who give special attention to the subject. Mines afford a wider range for profit than any other public securities. The best are free from debt, have large reserves, and pay dividends of 10 to 20 per cent. per annum. Instances frequently occur of young mines rising in value 400 or 500 per cent. But this class of security, more than any other, should be purchased only upon the most reliable information. The undersigned devote special attention to railways and mines, afford every information to capitalists, and effect purchases and sales upon the best possible terms. Thirty years' experience in mining pursuits justifies us in offering our advice to the uninitiated in selecting mines for investment; we will, therefore, forward, upon receipt of Post-office order for 5s., the names of six dividend and six progressive companies that will, in our opinion, well repay capitalists for money employed.

Messrs. TREDNICK AND CO., STOCK AND SHAREBROKERS, and DEALERS IN BRITISH MINING SHARES, 78, LOMBARD STREET, E.C.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the ALFRED CONSOLS MINING COMPANY.—By an order made by His Honor the Vice-Warden of the Stannaries in the above matter, dated the 16th day of November inst., on the petition of William Harvey, John Pool, and William Hooken, all of Hayle, within the said Stannaries, shareholders of the said company, it was ordered that the said ALFRED CONSOLS MINING COMPANY should be WOUND-UP by this Court, under the provisions of the Companies Act, 1862, and the Vice-Warden thereby appointed Thomas Wallis Robinson, of Penzance, in the county of Cornwall, official liquidator of the above-named company until the further order of the said Court.

HENRY SEWELL STOKES, Solicitor, Truro.
(Agent for John Roscorla, Solicitor for the Petitioners, Penzance).
Dated this 16th day of November, 1864.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

In the Consolidated Causes of GATLEY v. RABEY the Younger; and ARNALL v. RABEY the Younger.
IN RE SOUTH WHEAL LEISURE MINE.

TO BE SOLD, pursuant to two several Orders made in the above Causes, and dated respectively the 17th day of August last, BY PUBLIC AUCTION, at SOUTH WHEAL LEISURE MINE, in the parish of Perranzabuloe, within the said Stannaries, on Tuesday, the 6th day of December next, at Eleven o'clock in the forenoon, either together or in lots, the MINE SETT or GRANT of the said company, and the undermentioned MINING MACHINERY and MATERIALS, viz.:—
ONE 24 in. cylinder PUMPING ENGINE, with workings complete; balance bob; BOILER about 9 tons.
About 20 fms. 9 in. pumps.
Doorpiece.
Windbore.
1 horse whim.
Beam and beam heads.
Whim rope 120 fms.
100 fms. of 1 1/2 in. rope.
20 fms. of 1/2 in. ditto.
6 wheelbarrows, carpenter's bench, shears 7 fms. complete, 5 pulleys, a quantity of new and old iron, and now and old timber, about 700 lbs. of powder, about 60 coils of safety-fuse, blacksmiths' bellows, anvil, vice, blocks, saw pit frame, and sundry other articles in general use in mines. Account-house furniture, consisting of bedstead, hair mattress, 5 tables and other articles.
For viewing the same, application may be made to the officer of the Court in possession, and for further particulars to—
Messrs. HODGE, HOCKIN, AND MARRACK, Solicitors, Truro
Dated Registrar's Office, Truro, November 17, 1864.

BROADFIELD COLLIERY, FENTON, STAKE-UPON-TRENT, STAFFORDSHIRE POTTERIES—EXPIRATION OF LEASE.

MR. HIGGINBOTTOM is instructed to SELL, BY PUBLIC AUCTION, at the BROADFIELD COLLIERY, on Tuesday and Wednesday, November 22 and 23, 1864.

ONE CONDENSING BEAM WINDING ENGINE, cylinder 15 in., stroke 4 ft.
ONE ATMOSPHERIC BEAM WINDING ENGINE, cylinder 36 1/2 in., stroke 5 ft.
ONE HORIZONTAL HIGH PRESSURE ENGINE, cylinder 20 in., stroke 4 ft.
ONE CONDENSING BEAM ENGINE, cylinder 30 in., stroke 4 ft.
ONE HIGH PRESSURE BEAM ENGINE, cylinder 12 in., stroke 4 ft.
ONE BEAM PUMPING ENGINE, cylinder 60 in., stroke 7 ft.
ONE BEAM PUMPING ENGINE, cylinder 80 in., stroke 8 1/2 ft.
Wrought-iron boilers, fly-wheels, shafts, driving gear, pit frames, pulleys, and wagons, pump trees and rods, capstan and rods, flat and round ropes and chains, weighing machines, buildings, wrought and cast-iron rails, tools, stores, &c.
Descriptive catalogues may be had on application to Mr. HIGGINBOTTOM, surveyor and auctioneer, Foley-place, London.
Broadfield Colliery is distant about one mile from the wharf of the Trent and Mersey Canal at Stoke-upon-Trent, and about one mile from the Stoke and Longton stations on the North Staffordshire Railway. Sale each day at Twelve o'clock.
Foley-place, London, November 10, 1864.

ELSWICK COAL MINES, NEWCASTLE-UPON-TYNE.

MR. FRANK MERCER WILL SELL, BY AUCTION, at the Turk's Head Inn, Newcastle-upon-Tyne, on Saturday, the 26th day of November, 1864, at One o'clock precisely, ONE-EIGHTH SHARE, and ONE-HALF of one other ONE-EIGHTH SHARE, of the VALUABLE COAL MINES under the TOWNSHIP OF ELSWICK, NEWCASTLE-UPON-TYNE, containing upwards of 800 acres, consisting of valuable seams of coal yet unwrought, and of the Brockwell seam, now in the course of working by Messrs. Cochrane, the lessees.
Printed particulars may be had of the Auctioneer, at his office, 28, Clayton-street, Newcastle-upon-Tyne; of Messrs. DOMVILLE, LAWRENCE, and GRAHAM, solicitors, 6, New-square, Lincoln's Inn, London, W.C.; Messrs. LAMB, BROOKS, and CHALLIS, solicitors, Basinstoke; and of Messrs. CLAYTON, solicitors, Newcastle-upon-Tyne.

IMPORTANT AND EXTENSIVE SALE AT THE SNIG LANE AND STANK COLLIERIES, NEAR PRESCOT, LANCASHIRE.
TO COLLIERY PROPRIETORS, ENGINEERS, IRONFOUNDERS, MILLWRIGHTS, BROKERS, AND OTHERS.

MR. THOMAS TRAVERSE has been favoured with instructions by the proprietor, in consequence of the expiration of his lease, to submit FOR SALE, BY PUBLIC AUCTION, on the said premises, on Monday and Tuesday, the 28th and 29th November, 1864, at Eleven o'clock in the forenoon each day, all the very VALUABLE CONDENSING, PUMPING, and WINDING ENGINES, WINDING APPARATUS, PLANT, and MACHINERY, WEIGHING MACHINE, TOOLS, IMPLEMENTS, UTENSILS, and a great variety of other useful miscellaneous effects, consisting of, chiefly—
ONE POWERFUL PUMPING ENGINE, with 66 1/2 in. cylinder, and 7 ft. 6 in. stroke of piston, iron beam, cold and hot water pumps, ram, air-pump and condenser, &c.
THREE WAGON BOILERS, 6 ft. 6 in. diameter by 19 ft. long, with furnace work and connections.
Head gear, capstan and rope, 4 lifts of pump trees, with bucket and clack pieces and windbore—the first lift 10 in. bore and 30 yards long, the second 11 in. bore and 24 yards long, the third 12 1/2 in. bore and 81 yards long, and the fourth 12 1/2 in. bore and 81 yards long. One iron working barrel, 12 in. bore and 9 ft. long; 3 brass ditto, 12 1/2 in. bore and 9 ft. long; clacks, rods, &c., and horse-trees and rods.
ONE ATMOSPHERIC PUMPING ENGINE, with cylinder 60 in. diameter, stroke of piston 8 ft., with two lifts of 14 in. pump trees, including bucket and clack pieces, windbore, clack, and 2 brass working barrels, 13 in. diameter and 9 ft. long.
TWO GLOBULAR BOILERS, each 16 ft. diameter, with furnace work and connections, capstan shears, shed, and rope, &c.
ONE CONDENSING WINDING ENGINE, with 22 in. cylinder, 4 ft. 10 in. stroke of piston, with pair of spur wheels, wrought-iron winding shaft, verticals, &c.
TWO GLOBULAR BOILERS, 16 ft. diameter, with furnace work and connections.
ONE WAGON BOILER, 6 ft. 9 in. diameter, by 14 ft. 3 in. long, with furnace work, pit head gear, &c.
ONE ATMOSPHERIC WINDING ENGINE, with 27 in. cylinder, and 4 ft. 10 in. stroke of piston, with pair of spur wheels, shaft, verticals, ropes, and pit head gear.
ONE CYLINDRICAL BOILER, 5 ft. diameter and 21 ft. long, with furnace work and connections.
ONE HYDRAULIC PUMPING ENGINE for underground.
WEIGHING MACHINE, to weigh up to 5 tons.
A large quantity of wagons, drawing sledges, cranes, rails and sleepers, baskets, landing plates, pulleys and shafts for jig brows, miners' lamps, wheelbarrows, riddles, spades, &c. Smiths' tools, comprising bellows, anvils, swages, tongs, vices, hammers, screwing tackle, &c., together with sundries in carpenter's shop, yard, and store room, office fixtures, and a variety of other articles, which, with the above, will be fully described in catalogues to be had prior to the sale.

The Prescott Collieries are distant two miles from the Rainhill and Kingston stations of the Liverpool and Manchester branch of the London and North-Western Railway. At the Kingston station an omnibus for Prescott meets the trains.

MINING MATERIALS FOR SALE.

MESSRS. JOHN WARE AND SON WILL SELL, BY AUCTION, at WHEAL NELSON MINE, near Camborne, on Saturday, December 3, at Ten A.M., the undermentioned ENGINE and MATERIALS, viz.:—
ONE 60 in. ENGINE, with BOILER.
8 10 in. pumps.
1 10 in. windbore.
1 10 in. doorpiece.
1 9 in. working.
Tram irons, bucket rods, chain, staples, bolts, screwing gear, 2 smiths' bellows, 2 anvils, smiths' tools, account-house furniture, &c.—November 5, 1864.

TYWARNHAILE MINE.

ENGINES AND MINE MATERIALS FOR SALE.

MESSRS. JOHN WARE AND SON WILL SELL, BY AUCTION, at TYWARNHAILE MINE, on the 5th and 6th of December next, the following MACHINERY and MATERIALS, viz.:—
ONE 70 in. ENGINE, with FOUR BOILERS.
ONE 70 in. ENGINE, with THREE BOILERS.
ONE 28 in. ENGINE, with ONE BOILER and crusher attached.
ONE 24 in. WINDING ENGINE, with ONE BOILER.
ONE 24 in. WINDING ENGINE, with ONE BOILER, and steam capstan attached.
80 fms. 15 and 16 in. ditto.
80 fms. 15 in. ditto.
50 fms. 11 in. ditto.
14 fms. 10 in. ditto.
250 fms. wood rods, from 16 to 12 inches square.
Strapping plates, bucket rods, chain, tram irons, wagons, skips, smiths and miners' tools, account-house furniture, &c.
Catalogues will be issued one week prior to the days of sale, and may be obtained of the Auctioneers, Exeter; Mr. NEWTON, Camborne; and the Agents on the mine.
The sale will commence each day at noon precisely.
N.B.—The mine is three miles from the shipping port of St. Agnes, and two miles from Scroster station.—November 5, 1864.

MINE SALE.

THE DURLIO MINE and MATERIALS FOR SALE, consisting of a PUMPING ENGINE, 36 in. cylinder, 9 ft. stroke in cylinder, and 8 ft. in the shaft, with ONE 10 ton BOILER; a first-class engine.
STEAM WHIM ENGINE, 20 in. cylinder, 7 ft. stroke, with 7 ton BOILER complete; a first-class engine also.
STEAM STAMPS ENGINE, 27 in. cylinder, 8 ft. stroke, with 8 ton BOILER; driving 36 heads.
About 250 fms. of pitwork, from 5 in. to 9 in.; about 600 fms. of wood and iron rods, horse whim, smiths and miners' tools, and the complete plant of the mine and sets.
For which purpose an auction will be held on the mine, to sell the whole, in one lot, on Monday, the 21st inst., at noon. If not then sold, will be offered in lots, by public auction, on a future day.
For inspecting the same, apply to the agent, on the mine; and for further particulars to the committee, or at the office of Messrs. SAMUEL HIGGS and SON, Penzance.
Penzance, November 3, 1864.

NICHOLLS, WILLIAMS, AND CO. ENGINEERS.

BEDFORD IRONWORKS, TAYVISTOCK.
MANUFACTURERS OF STEAM ENGINES OF EVERY DESCRIPTION, made on the BEST and NEWEST PRINCIPLES. We beg more especially to call the attention of the public to the manufacture of our BOILERS, which have been tested by most of our leading engineers. PUMP WORK CASTINGS OF EVERY DESCRIPTION, both of brass and iron. HAMMERED IRON and HEAVY SHAFTS OF ANY SIZE. CHAINS made of the best iron, and warranted. RAILWAY WORK OF EVERY DESCRIPTION.
ALL ORDERS FOR ABROAD RECEIVE THEIR BEST ATTENTION. NICHOLLS, WILLIAMS, and Co. have had 20 years' experience in supplying machinery to foreign mines, and selecting experienced workmen to erect the same, where required.
Messrs. NICHOLLS, WILLIAMS, and Co. have always a LARGE STOCK OF SECOND-HAND MINE MATERIALS in stock, and at moderate prices.

PATENT FLEXIBLE TUBING, AND BRATTICE CLOTH FOR MINES,

MANUFACTURED BY
ELLIS LEVER,
PATENTEE,
WEST GORTON WORKS, MANCHESTER.

TAVISTOCK IRONWORKS AND STEEL ORDNANCE COMPANY (LIMITED).

(LATE GILL AND CO.)
ENGINEERS, IRON AND BRASS FOUNDERS,
MANUFACTURERS OF
STEAM ENGINES, BOILERS, AND MACHINERY OF ALL KINDS.
CHAINS, SHOVELS, EDGE TOOLS, AND EVERY DESCRIPTION OF CAST AND HAMMERED IRON FOR MINING, MANUFACTURING, RAILWAY, OR AGRICULTURAL PURPOSES.
Machinery sent to all parts of the world.
Foreign mining companies supplied on liberal terms.

BEVERLEY IRON AND WAGON COMPANY (LIMITED).

RAILWAY WAGON BUILDERS, MAKERS OF THE PATENT PRIZE CLOTH CRUSHERS and AGRICULTURAL IMPLEMENTS, MANUFACTURERS OF PATENT WHEELS, &c., with wood or iron naves.
Coach builders, wheelwrights, coach proprietors, &c., should use these wheels, as they are the best and cheapest in the world.
Gentlemen, farmers, and others applying direct to the works will be liberally treated.
Catalogues, prices, &c., can be obtained on application to the Works, Beverley, Yorkshire.
JAMES DEWHIRST, Sec.

RAILWAY CARRIAGE COMPANY (LIMITED),

ESTABLISHED 1847.
OLDBURY WORKS, NEAR BIRMINGHAM.
MANUFACTURERS OF RAILWAY CARRIAGES and WAGONS, and EVERY DESCRIPTION OF IRONWORK.
Passenger carriages and wagons built, either for cash or for payment over a period of years.
RAILWAY WAGONS FOR HIRE.
CHIEF OFFICES, OLDBURY WORKS, NEAR BIRMINGHAM.
LONDON OFFICES, 6, STOREY'S GATE, GREAT GEORGE STREET, WESTMINSTER.

THE BIRMINGHAM WAGON COMPANY (LIMITED)

MANUFACTURE RAILWAY WAGONS OF EVERY DESCRIPTION, for HIRE and SALE, by immediate or deferred payments. They have also wagons for hire capable of carrying 6, 8, and 10 tons, part of which are constructed specially for shipping purposes. Wagons in working order maintained by contract.
EDMUND FOWLER, Sec.
OFFICES, 3, NEWHALL STREET, BIRMINGHAM.

THE MIDLAND WAGON COMPANY

ESTABLISHED 1853.
RAILWAY WAGONS.—This company having from SIX to SEVEN THOUSAND COAL, COKE, IRONSTONE, and BALLAST WAGONS, have generally a number TO LET for one or more years, including repairs, at Rugby, Peterboro', Shrewsbury, Chester, Carnforth, Stoke-upon-Trent, Staveley, Drottwich, Worcester, Gloucester, Reading, Hereford, Newport (Mon.), Cardiff, and Birmingham.
They also CONTRACT for WAGON REPAIRS at any of the above stations.
The company BUILD EVERY DESCRIPTION OF RAILWAY WAGONS and CARRIAGES for CASH, or by DEFERRED PAYMENTS, extending over three, five, seven, or ten years.
HENRY BRIDGES, Sec.
Midland Works, Birmingham.

HORIZONTAL ENGINES FOR SALE, at very low prices:—

One 12 in. cylinder, 24 in. stroke; one 12 in. cylinder, 36 in. stroke; and two 14 in. cylinders, 24 in. stroke. All ready for delivery, and may be had with or without fly-wheels.—Apply to Messrs. E. PAOS and Co., Laurence Pountney-place Laurence Pountney-hill Cannon-street E.C.

NEW COMBINED TURBINE, WINDING, AND PUMPING MACHINERY,

MANUFACTURED BY GEORGE LOW, MILGATE IRONWORKS, NEWARK-UPON-TRENT.
Who respectfully begs to bring the above to the notice of the mining public, as an exceedingly cheap and easy method of applying water-power for the above purposes.
The TURBINE, WINDING, and PUMPING MACHINERY are all fixed complete to one strong cast-iron bed plate, which can be placed in any situation without pit or excavation, and any height not exceeding 33 ft. from bottom of fall, the supply and suction pipe being all that is required to be connected to it, and can be brought in any direction. This combined machine can be easily removed when necessary.
G. Low begs also to state that the TURBINE is the most efficient and the cheapest method of applying water-power for mining purposes.
MANUFACTURER OF WINDING, PUMPING, CRUSHING, STAMPING MACHINERY, WINDING ENGINES, WATER WHEELS.
IMPROVED TURBINE WATER WHEELS CONSTRUCTED EITHER TO WORK VERTICALLY or HORIZONTALLY, and upon the MOST SCIENTIFIC and EFFECTIVE PRINCIPLE.
G. Low begs to recommend a special class of turbine adapted for extreme high falls (200 to 500 ft.), and consuming small quantity of water. This turbine will work with equal advantage without running at an excessive velocity. Also, MANUFACTURER OF IMPROVED BORING MACHINES FOR DRIVING ADITS.

TO IRON AND COAL MASTERS, MINING AND QUARRY COMPANIES, &c.

FOR PREVENTING IRON FROM RUST, AND WOOD FROM DECAY.

A BRILLIANT JET BLACK, SUPERIOR TO PAINT in APPEARANCE, dries in less time, contains preservative qualities of the best description, and is economical in its use. One gallon at 1s. is equal to 14 lbs. of paint, which costs 4s. For COLLIERIES, HEAD GEARINGS, RAILWAY WAGONS, BOILERS, CASTINGS, CANAL BOATS, &c., it is especially adapted. In casks containing 10, 15, and 20 cwts. each. In quantities of 1 ton and upwards, price £11 per ton.

TURPENTINE SUBSTITUTE.
GLOVER and Co. have now on hand a really splendid painting sample of spirits of turpentine substitute, a pure crystal, not more volatile than the genuine American turpentine, and quite inoffensive to smell. Price, 2s. per gallon, in 30-gallon casks.

PETROLEUM.

This oil gives a pure, white, soft, and brilliant light, easily regulated, and portable. For works or public buildings, where gas is not desirable, the brilliancy and economy of the article are unequalled.

WASTE NO OIL.

STRONG IRON OIL CISTERNS.
Not liable to leak, and which economise space in the stores. From 600 gallons, 48 diameter by 84 in height, price £10 10s., down to 10 gallons, 15 diameter by 21 in height, price 15s., WITH EVERY VARIETY OF SIZE AND PRICE BETWEEN.

STRONG IRON BUCKETS:—
2 1/2 galls. .. 4s. 6d. | 3 galls. 5s. 0d. | 3 1/2 galls. .. 5s. 6d. | 4 galls. 6s. 0d.

WAGON GREASE.

GLOVER AND CO., No. 40, MANESTY LANE, LIVERPOOL.

CAPT. C. WILLIAMS, TYN-Y-WERN, TALIESIN,

via SHREWSBURY, has had upwards of 20 years' practical experience in mining, during which time he had the entire management of several English and Welsh mines. Residing in the centre of the CARDIGANSHIRE MINING DISTRICT, and in close proximity to those of MERIONETHSHIRE and MONTGOMERYSHIRE, he OFFERS HIS SERVICES TO SURVEY and REPORT UPON ANY MINE.

BRITISH AND FOREIGN INVESTMENT.

MR. THOMAS SPARGO, STOCK, SHARE, AND MINING BROKER, 224 and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C., TRANSACTS EVERY DESCRIPTION OF BUSINESS IN THE PURCHASE and SALE of SHARES in BANKS, CANALS, MINES, RAILWAYS, BRIDGES, INSURANCES, and ALL OTHER DESCRIPTIONS OF BRITISH and FOREIGN STOCK.
Mr. SPARGO has for sale shares in English mines paying from 10 to 20 per cent. upon the present price, in 12-monthly and quarterly dividends, as also a number of shares in good progressive mines, some of which he with confidence specially recommends to the public as sound investments.

Mr. SPARGO gives every information as to position and prospects of all mining undertakings, upon application, either personally or by letter, and is enabled, through his long experience, aided by his monthly visits to Cornwall, Devon, and Wales, to obtain the most reliable information as to the numerous mines in those districts. He will, at all times give the best advice as to investment in mines, and, if necessary, inspect them himself; as in all cases he wishes to be guided by the intrinsic value of the property. Upon the receipt of 5s. he will furnish a selected list of dividend and progressive companies.

Mr. SPARGO has published the following works, viz.:—
Statistics and Observations upon the Mines of Cornwall, 1859, price 2s. 6d.
Ditto ditto ditto 1860, price 2s. 6d.
Ditto ditto ditto 1862, price 2s.
Ditto ditto ditto 1864, price 2s.

Physical, Geological, and Parish Map of Cornwall. Scale, three miles to an inch. Printed in three colours, showing distinctly the mining districts, the height of the hills, &c. Price 10s. 6d., on cloth and rollers.
Geological maps of the various mining districts, showing the boundary line of each mine, with the lodes, cross-courses, and elvan courses, by which it is traversed. Price 2s. 6d. each.
A Model, or Relief, map of Cornwall (6 ft. 6 in. by 5 ft.), presenting the names of every town and village, as also every characteristic point of the county. Price 25 s.
Dividends received, calls paid, and all orders promptly negotiated.
Commission 1 1/2 per cent.

Mr. SPARGO has 20 years' experience of mining, ten of which he was engaged in practical mining, and ten years he has transacted business in mining shares and stock, 224 and 225, Gresham House, Old Broad-street, City, E.C.
Bankers: Bank of London, and the Metropolitan and Provincial Bank (Limited).

square, London. Consultation daily from Eleven till Two and Six till Eight. Sund
Ten till Twelve.

PROGRESSIVE MINES.

Shares	Mines.	Pd.
700	Abendoway (all land) Mexic.	4

Shares	Mos.	Paid.	Last Pr.	Bus. done.	Last Ca.
700	Aberderry (att.-lead), Merio.	4 10 0.	—	—	July, 18
1000	Alt-y-Crib (lead) [L. £5].	2 0 0.	—	—	Nov., 18
6000	Bagtor (tin) [L.].	1 0 0.	—	—	July, 18
4000	Bedford Cons. (cop.), Taviak.	2 10 0.	—	—	Nov., 18
3200	Bedol Aur (lead), Holywell.	0 12 0.	—	—	June, 18
800	Billins (lead).	30 0 0.	—	—	Fully paid
6000	Boscawen (tin), Kenwyn.	2 10 0.	—	—	Feb., 18
5000	Bottle Hill (tin), Plympton.	1 8 6.	—	—	May, 18
30000	Browlow (d.), Llanfyllid, Salop.	2 0 0.	—	—	Fully paid
200	Bryndol Hall (lead), Flint.	30 0 0.	—	—	Aug., 18
600	Bryn Gwlog (lead), Flint.	9 0 0.	—	—	June, 18
1832	Bryntal (lead), Llanidloes.	8 7 6.	—	—	June, 18
6380	Buller & Bassett, (cp.) Redruth.	4 11 6.	—	—	Feb., 18
215	Calvadnack (tin), Wendron.	25 3 6.	—	—	Aug., 18
1000	Camborne Consols (copper).	18 10 0.	—	—	Feb., 18
1600	Camborne Veau & Wh. Francis 10	5 4.	2½.	2½ 2½	Oct., 18
8000	Cardarn Cornwall (cop.), [L. £2 10s.]	1 0 0.	—	—	Aug., 18
12000	Caradon & Phenix Cons. (copper).	0 10 0.	—	—	Aug., 18
914	Caradon Cons. (cop.), St. Cleer	29 6 0.	—	—	Sapt., 18
10000	Caradon Vale (copper).	—	—	—	—
3000	Carneloe (tin and cop.), Zenner	1 0 0.	—	—	Jan., 18
6000	Carn Camborne (cop.) Cambn.	1 11 0.	1½.	1½ 1½	Oct., 18
5048	Carnyorth (tin), St. Just.	4 10 0.	—	—	July, 18
200	Carypfort (3000) [L. £4.], 16800	11 pd.	—	—	Fully paid
1000	Casnewydd, Ireland, [L.].	—	—	—	—
2500	Cefn Cilcen (d.), Flint [L. £5]	2 8 0.	—	—	Aug., 18
800	Cefn Cwm Brywny (lead)	4 0 0.	—	—	Sapt., 18
2500	Central Minera (lead) [L. £5]	2 12 0.	—	—	Aug., 18
3000	Chiverton Moor (lead)	3 0 0.	—	—	Oct., 18
4000	Clara Unit., Ponterywd [L. £3]	2 2 0.	—	—	Jan., 18
1024	Cler's Hill, tin, St. Stephen's	0 3 0.	—	—	—
6000	Clelland (tin), [L. £3].	10 0 0.	—	—	—
737	Cllifh & Wentworth (tin).	33 0 0.	—	—	Aug., 18
3000	Cloance Wood (tin) [L. £5].	3 0 0.	—	—	Oct., 18
10000	Coalatras & Bond [L. £800. Ltd.,	1070 12s. pd.]	—	—	Jan., 18
60000	Connorree (cop., sulph.) [L.]	0 0. 18s. 6d.	1s.	—	Fully paid
6000	Cornish Clay and Tin [L.].	1 0 0.	—	—	Fully paid
861	Crane (copper), Camborne.	28 7 0.	—	—	Oct., 18
30000	Crenver and Wh. Abraham [L.]	2 10 0.	—	—	—
2500	Croake (cop.), Taviak.	2 10 0.	—	—	April, 18
1200	Crowan Cons. (cop.), Crow.	5 0 0.	3	—	Oct., 18
2000	Crowlim (lead), Llanidloes.	1 11 0.	—	—	Dec., 18
6000	Cudder (cop., tin), St. Austell	4 5 0.	—	—	July, 18
10000	Cwmsymlog (att.-ld.), [L. £5]	2 0 0.	—	—	May, 18
5000	Dale (lead), North Stafford.	1 0 0.	—	—	Fully paid
1000	Darren (lead) [L.], Cardigan.	6 0 0.	—	—	May, 18
474	Ding Dong (tin), Gulval.	44 0 0.	—	—	Dec., 18
10000	Direwryng (d.) [L.].	15 0 0.	—	—	Aug., 18
1000	Eaglebrook (lead), [L. £20]	17 2 0.	—	—	April, 18
1000	East Bassett and Grylls (tin).	2 7 6.	—	—	—
6000	E. Bottle Hill (tin), Plympton	0 4 6.	—	—	Aug., 18
60000	East Cambrian (gold) [L. £1].	0 15 0.	—	—	Feb., 18
6000	East Carn Brea (cop.) Redruth	3 15 0.	6½.	6½ 6½	Feb., 18
3000	East Chiverton (lead)	2 10 6.	—	—	Aug., 18
60000	E. Cloagau (gold), Merio, [L. £1]	0 5 0.	—	—	Nov., 18
4000	East Devon Cons. (copper)	1 16 0.	—	—	Mar., 18
3248	E. Falmouth (s.-ld.), Kenwyn	5 0 6.	—	—	April, 18
6000	E. Grenville (cop.), Camborne	2 9 0.	6½.	6½ 6½	Nov., 18
40000	E. Gt. Work (tin), Breage [L. £5]	3 10 0.	—	—	Oct., 18
6000	E. Gunnissall & S. Bedd. (cop.)	7 19 6.	½.	½ ½	Sept., 18
6145	East Jane (sil.-ld.), Cardinham	2 7 0.	—	—	Mar., 18
50000	East Lacey (lead) [L. £3]	2 0 0.	2½.	2½ 2½	July, 18
1024	E. Margaret (tin), Uny Lelant	20 0 0.	—	—	Aug., 18
6000	East Derrett Cons. (copper)	4000 0 6d. pd.	—	—	Nov., 18
3986	E. Providence (tin), Uny Lel.	4 9 8.	2½.	—	Sept., 18
60000	East Saneffell (lead) [L. £3]	1 10 0.	—	—	—
1100	East Seton (cop.), Camborne.	0 10 0.	—	—	Dec., 18
256	East Tolgus (copper), Redruth	90 0 0.	—	—	Nov., 18
10204	E. Treskerby (cop.), Redruth.	10 1 0.	6	5½ 5½	Aug., 18
4000	East Wheal Abraham (copper).	0 5 0.	—	—	Aug., 18

Share.	Mines.	Paid.	Last Pr.	Div. divs.	Last Co.
190 N. Roskar (cop.), Camborne		34 15 0.	18½.	17½	18½.
6144 North Roskar (cop.)		1 0 0.	..	..	..
2000 No. Shepherd (lead), Newbury		4 0 0.	..	..	..
6000 N. Wh. Bassett (cop., tin) [S.E.]		4 0 0.	..	4½	5.
5410 North Wh. Crofty (cop.) [S.E.]		2 10 0.	..	1½	1½
6144 N. Wh. Robert, Spang, Spinay		3 12 11.	..	2½.	2½
1000 N. Wh. Seton, Camborne [L. £25]		2 10 0.	..	..	..
12268 Okel Tor (cop.), Calstock		2 3 10.	..	..	..
8448 Peden-an (tin), Redruth		4 8 0.	..	..	..
5000 Pendean (cop.), St. Aust		4 9 0.	..	..	..
5000 Penhalla (tin), St. Agnes		4 0 0.	..	3½	..
512 Penhallow Moor (silver-lead)		2 10 0.	..	..	..
6000 Penrill (sil. id.), Merion, [L.]		2 7 0.	..	..	..
6000 Polhigey Moor (tin), Wendron		1 18 0.	..	..	..
12500 Prince of Wales (tin), Calstock		0 6 0.	..	..	..
6000 Princess of Wales (tin), Sancedred		1 0 0.	..	..	..
6000 Prosper (cop.), St. Aust		1 6 0.	..	..	..
10166 Redmoor (cop., tin), Callington		1 6 0.	..	..	..
512 Retanna Hill (tin), Wendron		2 17 0.	..	..	..
6000 Rhafnas (lead), Carmar. [L. £1]		0 10 0.	..	..	..
6000 Restrigrall (iron), St. Wenn	
6000 Borobrough Down (cop.) [L. £25]		4 10 0.	..	..	..
3998 Rosewarne Consols (copper).		4 11 6.	..	..	..
3545 Rosewarne Consolidated (cop., tin)		8 12 9.	..	..	..
6000 Roskar (copper), Gwennap		1 0 0.	..	..	..
700 Roskarnoworth (cop.), Camborne		1 10 0.	..	..	..
2000 Roscorlor (tin, cop.), St. Agnes		4 13 6.	..	..	..
800 Segienias, Montgomery [L. £25]		5 0 0.	..	..	..
20000 Sasefell (lead) Isle of Man [L.]		1 0 0.	..	..	..
12500 Silver Moun. (lead) [L.]		2 0 0.	..	..	..
20000 Sil. Yeln. St. Winnow [6000 £1 pd., 5000 5s. pd.]		3 10 0.	..	..	..
6000 Sil. Yeln. St. Winnow [6000 £1 pd., 5000 5s. pd.]		3 10 0.	..	..	..
12300 Sordridge Cons. (cop.) [S.E.]		1 0 0.	..	1½	2
6000 S. Alfred Cons. (cop.), Pillaick		0 13 6.	..	..	..
512 South Bassett (cop.), Gwennap		16 10 8.	..	..	..
100 South Bryn Gwioig (lead)		7 0 0.	..	..	..
6000 So. Buller (copper), Gwennap		0 14 0.	..	..	..
4096 S. Caradon Wh. Hooper (cop.)		4 2 0.	..	..	..
6000 South Carn Brea (cop.)		7 11 0.	..	..	..
6000 S. Condurda (cop.), Gwennap		1 0 0.	..	..	..
2283 Sou. Crenvor (cop.), Crown.		12 9 0.	..	1½	1½
6000 South Darran (id.) [L. £24]		3 4 6.	..	..	..
6000 S. Dolcoath & Carnarthen Cons.		2 13 0.	..	1½	1½
5000 S. Foxdale (id.) L. of Man [L. £5]		3 0 0.	..	..	..
2000 South Goriand (cop.), St. Day		4 10 0.	..	..	..
2000 South Grylla (cop.) [L. £10]		10 9 0.	..	..	..
1024 S. Herodafost (lead), Liskeard.		23 10 0.	..	..	..
96 South Kilnham (lead)		23 10 0.	..	..	..
2000 South Lovell (tin), Wendron		2 0 0.	..	2	..
4000 S. Minera (lead) [L. £24]		4 0 0.	..	1½	2
96 South Pant-y-Gof (lead)		27 0 0.	..	..	..
2000 South St. Ives (tin), St. Ives.		0 5 0.	..	..	..
6326 So. Phenix (cop.) Linkin.		7 1 4.	..	..	..
1024 S. Tresavan (cop.), St. Day		5 6 7.	..	..	..
987 So. Wh. Croft (cop.) [L. £24]		11 11 0.	..	..	..
5791 So. Wh. Leisure (tin and cop.)		0 10 0.	..	11½	11½
400 So. Wh. Seton (cop.), Camborne		49 13 0.	..	..	..
794 Spearne Cons. (tin), St. Just.		6 10 0.	..	..	..
10000 St. Cathbert Lead Smeit. [L.]		1 5 0.	..	..	..
40000 St. David's (gold) [L. £2 10s.]		1 5 0.	..	..	..
900 St. Ives Wheat Allen (tin).		15 0 0.	..	..	..
8000 St. Just Untd. (tin) [L. £24]		1 5 0.	..	..	..
6000 St. Just Cons. (tin) [L.]		0 15 0.	..	..	..
640 Stamp Office (lead), Mold.		1 0 0.	..	..	..
920 Stray Park (cop., tin) [S.E.]		34 15 0.	..	18	19
3500 Tin Hill (tin), St. Austell.		0 17 0.	..	..	..
6000 Tolcarne (cop.), Camborne		2 2 0.	..	..	..
6000 Tolvaaden (copper), Marazion		1 0 0.	..	..	..
6000 Treiowden (cop.), St. Erth.		7 8 8.			

2048 Treworllis (tin), Wendron .. 6 15 1.. —Oct.
2500 Trimley Hall [1250 £1 pd., 1250 15s. paid]April

985	East Wharf City (tin), Cardiffham	..	..	..	..	Sept., 1864
986	E. Wm. Russell, Tavis, [S.E.] ..	5	0	0.	3	Sept., 1864
987	Farmington (tin and cop.) ..	2	0	0.	5	" 2 ½ "
988	Ferwelin lead, [L.E.] ..	1	0	0.	..	..
99144	Eather Undt. (tin), Cardingham	3	0	10.	..	Sept., 1864
99000	Fortescue Con. (sil.), Endellon	10	12	6.	..	..
99000	Furze Hill Wood Cons., Buckl.	1	5	6.	..	April, 1864
94986	Gardlands Untd. (tin), Wendron	4	1	6.	..	Mar., 1864
99000	Gawton (copper), Tavistock ..	2	11	6.	..	Oct., 1864
99000	Gen. Min. Co. for Irel. (cop.)	1	0	0.	4½	..
99000	Glasgow-Caradon Con. (cp.) [L.]	4	0	0.	..	Fully paid
99000	Gladolphin (cop. tin), Crowan ..	1	0	0.	8.	Sept., 1864
99000	Gannan (sil. and cop.) ..	12	10	0.	..	April, 1864
99000	Golch Hill (lead), Elmthirste ..	1	4	5.	..	No coal.
99144	Gonnemena (copper), St. Cleer ..	4	9	0.	2 3	Sept., 1864
99000	Goonzlon (copper), St. Neot ..	1	12	6.	..	Aug., 1864
486	Gramb. & St. Aub. (cp.) [S.E.]	63	0	0.	5 6	Sept., 1864
99000	Great Brigant (cop.), Redruth ..	6	11	6.	..	Sept., 1864
96986	Great Caradon (cop.), St. Ive ..	2	14	0.	..	Sept., 1864
99000	Great Devon and Bedford [L.]	1	15	0.	..	Mar., 1864
99000	Gr. East Lovell (tin), Helston ..	1	9	0.	2 3	..
99000	Great North Hill (copper) ..	4	0	0.	5½	Sept., 1864
99000	Gr. Retallack (sil.-id.-and cop.)	2	6	6.	..	April, 1864
99000	Great S. Chiverton (sil.-lead).	0	10	0.	3½ 3¼ 3¾	April, 1864
99000	Great Tregune Consols (cop.).	0	5	0.	..	..
99000	Great West Chiverton (lead)..	1	0	0.	..	June, 1864
97780	Great Wheal Badburn (tin)..	6	16	0.	..	May, 1863
99000	Gr. W. Whys (cop. tin), Ken.	13	14	6.	2½ 1½ 2	April, 1863
97672	Gr. Wyl Grylls (tin, copper) ..	1	0	0.	..	No coal.

6000	Trumpet Union (tin), Wendron	1 9 6.
6040	Tyne Head (tin & cop.) [L. £1]	0 17 0.	Sept. 16
6000	Tywarnhale (copper)	0 17 6.	July 16
6000	Vale of Towry (lead), Carmar.	5 18 6.	6s.	4s. 6s.	Oct. 16
10000	Walkham (tin), Llanelli [L.]	1 0 0.	..	1 1/2..	July 16
4000	Wentnor (tin), £24 1/2 (lead)	2 4 0.	Oct. 16
10000	Wentworth Consols (lead) ..	3 0 0.	8.	8 9	..
60000	Welsh Gold, Dolgelly [L.]....	1 0 0.	July 16
20000	West Beam (tin) [L.]	1 0 0.	July 16
10000	West Clogau (copper), Merioneth	1 0 0.	July 16
4000	West Cwm Erfin (lead) [L.]	2 0 0.	Oct. 16
1218	W. Cundurrow (tin, cop.), Cam.	9 6 8.	9s.	7s. 9s.	..
2500	W. Great Work (tin), Gernos	1 18 0.	Sept. 16
10000	W. Grylls (tin), Perrarulhmo	0 4 0.	Nov. 16
6000	W. Maria & Fergus Consols	0 0 0.	May 16
10000	West Nantlle (lead) [L.]....	10 0 0.	Oct. 16
19000	West Par Con. (cp.) St. Blazey	2 17 0.	Aug. 16
1000	W. Rose Down (copper), Cardron	10 0 0.	Oct. 16
258	West Sharp Top (cp.) Killaton	0 0 0.	Oct. 16
1056	West Stray Park (cp.), Camb.	9 11 6.	May 16
512	West Tolgus (cop.), Redruth	40 0 0.	72 1/2.	60 65	Oct. 16
6181	West Trevelyan (tin, copper)	4 3 0.	Mar. 16
512	West Wh. Frances (cp.), Illo	62 0 0.	30	25 30	Aug. 16
9017	West Wharfedale (cp.), (tin, &c.)	5 16 10.	Sept. 16
6000	West Wharfedale (tin),	1 0 0.	Aug. 16
4000	West Wh. Martha (cp. & sil.) [L. £2]	1 5 0.	July 16
4096	West Whcal Vor (tin), Helston	1 10 0.	Sept. 16
6000	Whal Arthur (copper), Illogan	5 11 0.	Sept. 16
6990	Wh. Arthur (cp.), Calstock	4 6 6.	April 16

656	Wheal Bullard, Redruth [S.E.]	26	0 0.	12	..	12 14	..	Nov.
1000	Wm. Caradon (cop.), St. Ives	2	2 6.	July.
1000	Wheal Curlrit (cop.), Crowan	8	13 4.	Aug.
1000	Wheal Crebor (cop.), Trevick	1	15 6.	2	..	1% 2	..	Nov.
1000	Wheal Crofton (cop.), Illogan	1	11	Oct.
6144	Damall (cp., tin), Gwennap	2	15 0.	July.
1000	Wm. Edward (cop.), Calstock	8	14 0.	Oct.
1024	Wheal Emily Henrietta (cop.)	12	15 0.	Sept.
4000	Wm. Emma (cp) Buckfastleigh	3	2 6.	Jan.
2000	Wheal Falmouth & Sperris	7	0 0.	Oct.
1000	Wm. Grenville (copper) [S.E.]	8	14 0.	5%	..	5% 5%	..	Oct.
1024	Wm. Grylla (tin), Perranuth	6	14 0.	Oct.
6130	Wm. Harriett (cop.), Camborne	1	2 6.	½ ¾	..	Sept.
6000	Wheal Harriet (cop.), Gwinear	1	2 6.	Oct.
1000	Wheal Hearnle (tin), St. Just	3	5 0.	Aug.
2048	Wheal Hope (sil.-ld.), Perran	4	2 6.	Oct.
8000	Wheal Ida (sil.-lead), St. Ives	0	10 0.	Sept.
4800	Wm. Ludcott and Wrey (lead)	3	14 2.	Aug.
968	Wheal Margery (tin, copper)	30	6 10.	3%.	..	3 3%	..	Dec.
1000	Wm. Mary Hutchings (Plymp.)	0	13 0.	Aug.
1000	Wm. Norris (tin, cp.), St. Cleer	3	14 7.	June.
1024	Wheal Park (cp., tin), Blaize	1	11	Aug.
1000	Wm. Pollard (cop.), St. Neot's	3	9 6.	April.
1024	Wheal Polmarc (copper)	4	13 9.	Oct.
970	Wm. Prosper (cp., tin), Breage	13	18 10.	Feb.
5000	Wm. Prudence St. Ag. [L. £1]	0	17 6.	Aug.
240	Wm. Reeth (tin), Uny Lelant	96	10 0.	Sept.

000	Nantes (vill., poppy), Rk.	. . .	. . .	. . .	Sep't. 1869
000	Nantes and Penrhllw Rh.	4	0	0	Fully paid.
000	Nantes (lead) [L. £1]	.	0	10	"Sept. 1864
612	Nant Minera (lead), L. £20	6	0	0	"Aug. 1864
400	Nant-y-Iago (id.), Merioneth	3	17	6	"May, 1863
000	New East Birch Tor (tin)	0	3	6	".. "
000	New Concord (sil.-ld.) [L. £3]	1	0	0	".. "
000	New Cornish (8000 £) pad. 4000 Tz. 6d. paid	..	..	..	"Mar. 1864

5000	Wheat Rose (copper), Scorrer,	32 34	..
5000	Wheat Sarah (tin), Lanivet ..	0 13 8	0June..
4096	Wheat Sidney (tin), Plympton	5 3 1July..
9043	Wh. Sithney & Carmarvel	12 10 0Aug..
5000	Wheat Sparrow (copper)	0 18 0Oct..
960	Wh. Trannack (cop.), Sithney	2 16 6July..
6000	Wheat Union (cop.), Redruth	4 14 6Oct..

514	N. Crow Hill (tin), St. Stephen	2 12 6.	..	..	Aug. 1864
516	New E. Russell (cop.), Tavistock	0 8 6.	..	..	Nov. 1864
400	Nether Heath (lead), Dutton	0 18 6.	..	..	Oct. 1863
400	New Hendra (tin, cop.), Breage	4 1 0.	..	..	Nov. 1864
400	New Pembroke (tin and cop.)	0 0 0.	..	..	May, 1864
400	New Rosewarne (cop.), Gwinear	2 0 0.	9	8 9	Dec. 1863
524	New S. Cardon (cop.), St. Cleer	0 16 6.	..	..	Dec. 1863
969	New Treleigh (cop.) Redruth	3 0 ..	..	..	Mar. 1864
969	New Trevenen (tin), Wendron	7 14 0.	..	..	Oct. 1864
470	Newtownards Min. Co., Down	50 0 0.	..	..	..
524	New Wendron (tin), Wendron	7 0 0.	..	..	Jan. 1863
524	New Wh. Grylls (tin and cop.)	2 1 6.	..	..	May, 1864
593	New Wheel Lovell (tin)	2 2 6.	..	..	June, 1863
593	New Wheel Martha (cop.) [L.]	1 0 0.	1½	1¼	Fully paid.
400	New Wh. Marazion (cop.), Camborne	12 16 0.	..	60 70	Mar. 1864
400	New Wh. Vor & Meta (tin), L.	0 2 ..	..	..	..
524	North Buller (cop.), Redruth	26 13 0.	..	..	Sept. 1864
400	North Chiverton (lead)	1 0 0.	2½	2 ¾	..
000	North Devon (sil.-ld.) [L.]	0 13 0.	..	..	Oct. 1863
000	N. Dolcoath (cop.), Camborne	3 1 6.	..	..	Jan. 1864
000	North Downs (cop.) Redruth	2 16 4.	1½.	¾ 1½	Nov. 1864
500	North Frances (cop.)	13 17 6.	..	..	Aug. 1864
000	N. Grambler (cop.), Redruth	4 7 6.	..	..	Aug. 1864
000	N. Gt. Work, Breage [L. £3]	2 9 0.	..	..	Aug. 1864
000	N. Hailenbeagle (£800 [L. pd., 5000 Ss. 6d. pd.]		..	..	July, 1863
000	N. North Jane (tin, silver-lead),	2 9 6.	..	..	Aug. 1864
000	N. Levant (tin, cop.), St. Just	9 3 0.	..	..	Sept. 1864
000	N. Minera (ld.) [15000 £1 pd., 5000 12s. 6d. pd.]		..	..	Aug. 1864
000	N. Phoenix (cop.) Lingshington	4 6 0.	..	..	May, 1864
400	No. Pool (tin & cop.), Illogan	1 15 8.	..	..	Jan. 1864

*. Those mines with [S.E.] appended have been admitted on the Stock Limited List.

*. Our object being to make the Share List correct, we earnestly call upon those which may, from time to time, come under their notices. To spare information. Reports from mines—in fact, mining intelligence of every

London: Printed by RICHARD MIDDLETON, and published by HENRY ENGLISH

8000	Wh. Unity (cop., tin), Gwinnar	12 10 0.	..	Aug.
4096	Wh. Uny (tin, cop.), Redruth	9 12 0.	33½ ..	Sept.
4500	Wheal Vlow (copper)	0 9 6.	..	Mar.
1024	Wh. Vyvyan (cop.), Constantine	9 15 0.	..	Aug.
994	Worvas Downs (tin), Lelant.	7 7 0.	..	June.
8097	Yarner (copper), Devon	3 15 6.	..	Sept.

MISCELLANEOUS.				
20000	Anglo-Mexican Mint	.....	10	0 0 .. 18 19 ..
20000	City Office [L. £500]	.....	5	0 0 .. 2½ .. 2½ .. Oct. 1
10000	Discount Corporation [L. £100]	.....	17	10 0 .. 18½ .. 18½ 14½ ..
20000	Ebbw Vale Iron Co. [L. £500]	.....	5	0 0
10000	Gellivara Iron [L. £500]	.....	10	0 0 4 6 ..
20000	Gen. Cred. & Fin. Lond. [L. £500]	.....	4	0 0 .. 67½ .. 67 7 ..
20000	General Steam Navigation	.....	14	0 26 .. 24 26 ..
20000	Humber Ironworks [L. £500]	.....	8	0 0 .. 84
20000	Imperial Mercantile Cred. [L. £500]	.....	5	0 0 .. 74 .. 74 8 ..
50000	Inter. Financial Soc. [L. £500]	.....	5	0 0 .. 74 .. 74 8 ..
20000	Joint-Stock Discount	.....	7	10 0 .. 49 .. 67 7½ ..
20000	Land & Glasg. Engr. [L. £500]	.....	10	0 0
10000	Millwall Ironworks	.....	5	0 0 .. 43½ .. 4 4½ ..
20000	National Financial [L. £500]	.....	5	0 0 .. 53½ .. 64 7½ ..
12000	Nerbudda [L. £50] [6000 £50 pd., 6000 £1 pd.]	.....	6	0 0
50000	Nova Scotia Gold & Land [L.]	.....	2	0 0 Fully p.
20000	Rhymney Iron [10000 £50 pd., 10000 £15 pd.]	.....	10	0 0
5000	Smith's Indiarub. Wks. [L. £500]	.....	10	0 0
20000	Swiler, Knight, & Co. [L. £500]	.....	5	0 0 .. 3½ .. 2½ 3½ ..

* * Our object being to make the Share List correct, we earnestly call upon all who have the power, to aid us, by forwarding any alterations or corrections which may, from time to time, come under their notice. To shareholders, as well as those officially connected with the mines, we appeal for information. Reports from mines—in fact, mining intelligence of every description, forwarded to our office, will meet ready attention.

LONDON: Printed by RICHARD MIDDLETON, and published by HENRY ENGLISH (the proprietors), at their office, No. 28, FLEET STREET, E.C., where all communications respecting this work should be addressed. NEW YORK: 1884.